

IX. Hymenoptera aculeata collected in Algeria by the Rev. A. E. EATON, M.A., F.E.S., and the Rev. FRANCIS DAVID MORICE, M.A., F.E.S. (Part I. Heterogyna, Fossores (pars) Trans. Ent. Soc., 1901, pt. iv, pp. 515-563. Part II. Diploptera, Fossores, 1905, part iv, pp. 399-417.) Part III. Anthophila. By EDWARD SAUNDERS, F.R.S. etc.

[Read March 4th, 1908.]

COLLETES SPECTABILIS, Moraw.

- ♀ 1. Constantine, visiting *Thapsia garganica*, 15, v, 95.
(A. E. E.)
♀ 1. Philippeville, 21, vi, 98. (F. D. M.)

COLLETES CORIANDRI, Perez.

- ♂ 1. Biskra, Route des Ziban, 25, ii, 94. (A. E. E.)
♂ 2. " near the river by the brick-kiln beyond the Fort St. Germain, 4, ii, 95. (A. E. E.)
♀ 1. " northern slope of the rocky ridge backing on the north of the Montagne de Sable, visiting *Retama retam*, Webb, 15, ii, 95. (A. E. E.)
♀ 1. " near Old Biskra, on *Periderca fuscata*, 9, ii, 94. (A. E. E.)

Dr. Longstaff took this species in some numbers at El Outaia, near Biskra, on *Spergula* flowers, March 1905, and one specimen at Biskra on *Euphorbia guyoniana*.

COLLETES NANUS, Friese.

- ♂ 1, ♀ 1. Biskra, near railway, Kilom. 199, visiting *Zizyphus lotus*, 29, iv and 3, v, 95.
(A. E. E.)
♂ 1. " a little above the barrage on or amongst *Tamarix*, 1, v, 97. (A. E. E.)

COLLETES PUMILUS, Morice.

- ♂ 4, ♀ 1. Biskra, 7-10, v, 98. (F. D. M.)

COLLETES EATONI, Morice.

- ♀ 1. Biskra, cornlands bordering the Route des Ziban leading to the Dunes, on *Ammi visnaga*, 25, v, 93. (A. E. E.)

- ♀ 1. Biskra, fields between the Negro village and Château Landon on *Ammi visnaga*, 9-10.30 a.m., 3, vi, 93. (A. E. E.)
 ♂ 3, ♀ 7. „ on *Tamarix*, 28, iv to 1, v, 97. (A. E. E.)

COLLETES LIGATUS, Er.

- ♀ 1. Biskra, near railway, Kilom. 199, on *Zizyphus lotus*, 3, v, 95. (A. E. E.)
 ♀ 2. Médéa, slopes of the Nador up to 3,300 feet, 8 to 10.30 a.m., 14, vii, 93. (A. E. E.)
 ♂ 1, ♀ 3. La Calle, near the cemetery, 4 and 8, vii, 96. (A. E. E.)

COLLETES BALTEATUS, Nyl.

- ♀ 3. Médéa, on *Daucus scitifolius*, 30, vii and 2, viii, 93. (A. E. E.)
 ♀ 1. Biskra, near the Col de Sfa, on flowers of *Decverra scoparia*, 26, xi, 94. (A. E. E.)
 ♂ 1, ♀ 1. Bône, 10 and 30, viii, 97. (A. E. E.)
 ♀. Philippeville, 21, vi, 98. (F. D. M.)

COLLETES PICISTIGMA, Thoms.

- ♂ 1. Azazga, 30, viii, 93. (A. E. E.)

COLLETES SUCCINCTUS, L.

- ♂ 2, ♀ 1. Constantine, on *Inula viscosa*, 9, x and 4, xi, 93. (A. E. E.)
 ♀ 2. Bône, on *Erica multiflora*, 28, xi, 93. (A. E. E.)
 ♀ 1. Constantine, Djebel Ouach, near the reservoirs, alt. 3,000 feet, visiting low compositæ, 11, x, 94. (A. E. E.)
 ♂ 1. Constantine, 2, vi, 95. (A. E. E.)

COLLETES ACUTUS, Per.

- ♂ 1. Constantine, on *Inula viscosa*, 15, x, 95. (A. E. E.)
 ♂ 4. Bône, on *Senecio leucanthemifolius*, 4 and 6, iii, 96. (A. E. E.)
 ♂ 1, ♀ 2. Algiers, 23, iv, 98. (F. D. M.)

Dr. Longstaff took this species at flowers of *Spergula*, 1, iii, 05, and with it two specimens of *C. braeatus*, Per., not included otherwise in this list.

PROSOPIS CORNUTA, Smith.

♂ 4, ♀ 2. Le Tarf, on *Feniculum vulgare* and *Ammi visnaga*, 25-27, vii, 96. (A. E. E.)

PROSOPIS DILATATA, Kirb., var. ?

♂ 1. Hippône, on *Ammi visnaga*, 15, viii, 96. (A. E. E.)

This specimen apparently differs only from *dilatata* in having the yellow colour more developed, it has the mandibles labrum and hind tibiæ entirely flavous, and has a small black spot on the intermediate tibiæ. The form of the scape of the antennæ, however, and the sculpture throughout appear to me to be identical with those of *dilatata*. In colour it more resembles *cervicornis*, Costa.

PROSOPIS SPILOTA, Först.

♂ 2 (one stylopized), ♀ 2, Hippône, on *Ammi visnaga*, 15, viii, 96. (A. E. E.)

♂ 1. Le Tarf, on *Feniculum vulgare*, 25, vii, 96. (A. E. E.)

♀ 1. „ on *Feniculum vulgare*, 27, vii, 96. (A. E. E.)

♀ 1. „ on *Ammi visnaga*, 26, vii, 96. (A. E. E.)

These specimens again are slightly different from what we know here as *spilota*, and I have had very great doubts as to whether I should describe them as a new species or not, but I have decided against doing so. Of the three males one is stylopized so that its characters may have been altered by the effect of the parasite. The others differ from the typical form in having the mandibles and labrum pale. The female differs from the typical form in having the first segment of the abdomen more finely punctured, but the characters are not decided enough to satisfy me that the two forms are distinct.

PROSOPIS VARIEGATA, F.

Both sexes common, Constantine, Le Tarf, La Calle, Bône, Hippône, Médéa, Biskra, on *Ammi visnaga*, *Eryngium triquetrum*, *tricuspidatum*, *Thapsia garganica*, May to September. (A. E. E. and F. D. M.)

All the males in both collections are of the ordinary red-bodied type and nearly all the females have the clypeus with a white central line, but three females of the var.

absoluta were found by Mr. Eaton, at Médéa on *Eryngium triquetrum* and two at Constantine on *Eryngium triquetrum* and *Thapsia garganica*; also among his specimens are four females with broad red mesonotal stripes and two males with the propodeum posteriorly red; of these the two males and two of the females were taken at Hippône, the other two females at Biskra. In these highly-coloured females the central polished line of the posterior face of the propodeum is more or less red, but the colour does not spread over the rest of the surface as in the males.

PROSOPIS QUARTINÆ, Grib.

- ♂ 5, ♀ 1. Biskra, near railway, Kilom. 199, at *Zizyphus lotus*, 30, iv to 3, v, 95. (A. E. E.)
 ♂ 9. " on *Deverra chlorantha*, 10, 11 and 13, v, 97. (A. E. E.)
 ♀ 1. " on *Ammi*, 21, v, 97. (A. E. E.)
 ♂ 2, ♀ 8. " 20, v to 3, vi, 98. (F. D. M.)

PROSOPIS PICTA, Smith.

- ♂ 4, ♀ 3. Bône, on *Rubus discolor*, 11-13, viii, 97. (A. E. E.)

PROSOPIS GAZAGNIERI, Vach.

- ♀. Biskra, ridge of hills and its spurs north-east of Hamman es Salahin, visiting *Ferula vesceritensis*, 5, iv, 95. (A. E. E.)
 ♀. " visiting *Antirrhinum ramosissimum*, 21, iii, 97. (A. E. E.)
 ♂ ♀. Algiers, 11 and 23, iv, 98. (F. D. M.)
 " var. *nigra*, ♂ 10, ♀ 9, 31, iii to 27, iv, 98. (F. D. M.)

PROSOPIS PURPURISSATA, Vach.

- ♂. Azazga, 1,900 feet, on *Eryngium triquetrum*, 12, ix, 93. (A. E. E.)
 ♂. " Forêt de Yakouren, on *Eryngium triquetrum*, 19, ix, 93. (A. E. E.)
 ♂. Bône, 28, iv, 96.
 ♀. " on *Mentha rotundifolia*, 6, viii, 96. (A. E. E.)
 ♂ 2, ♀ 2. Bône, on *Rubus discolor*, 11 and 12, viii, 97. (A. E. E.)

PROSOPIS PURPURISSATA, black var. = *stigmorrhina*, Per.

- ♂ 1. Algiers, 28, iv, 98. (*F. D. M.*)
♀ 1. Constantine, 16, v, 98. (*F. D. M.*)

PROSOPIS GRIBODOI, Vach.

- ♂ 12, ♀ 5. Biskra, on *Tamarix*, 28, iii to 19, iv, 97.
(*A. E. E.*)
♀ 2. „ on *Tamarix brachystylis*, 4, iv, 95.
(*A. E. E.*)

PROSOPIS FERTONI, Vach.

- ♂. Algiers, 8, iv, 98. (*F. D. M.*)
♀. Algiers, base of Bou-zaréa, near the Faubourg Babel-Oued, on a yellow *Linum*, 28, iv, 93. (*A. E. E.*)

PROSOPIS PILOSULA, Per.

- ♀. Biskra, ridge of hills and its spurs north-east of Hamman es Salahin, visits *Ferula vesceritensis*, 5, iv, 95. (*A. E. E.*)

PROSOPIS SULPHURIPES, Grib.

- ♂. Algiers, on the ramparts, on *Reseda*, 9, iii, 93.
(*A. E. E.*)
♂. Hussein Dey, on the banks of the main road, 4, iv, 93.
(*A. E. E.*)
♀. Biskra, near the Col de Sfa, on flowers of *Decverra scoparia*, 26, xi, 94. (*A. E. E.*)
♀. Le Tarf, on *Ammi visnaga*, 26, vii, 96. (*A. E. E.*)
♂. Algiers, 8 and 14, iv, 98. (*F. D. M.*)

PROSOPIS CLYPEARIS, Schk.

- ♂ 2, ♀ 1. Azazga and Yakouren, on *Eryngium tricuspdatum*, alt. 1,900 feet, and 19, ix, 93.
(*A. E. E.*)
♂ 2. Bône, on *Ammi majus* and *Daucus*, 8, viii, 96.
(*A. E. E.*)
♂ 1. „ on *Daucus gracilis*, 13, viii, 97. (*A. E. E.*)
♀. Near Algiers, on *Magydaris tomentosa*, 5, v, 93.
(*A. E. E.*)
♀ 9. Le Tarf, on *Feniculum vulgare*, 25 to 27, vii, 96.
(*A. E. E.*)
♀ 6. Hippône, on *Ammi visnaga*, 10 and 15, viii, 96.
(*A. E. E.*)

- ♀ 1. Bône, on *Scdum cœrulcum*, 14, v, 96. (A. E. E.)
 ♀ 1. Constantine, 11, x, 94. (A. E. E.)

PROSOPIS DUBITATA, Alfk.

- ♂ 1. Le Tarf, on *Fœniculum vulgare*, 24, vii, 96.
 (A. E. E.)
 ♀ 1. Hippône, on *Ammi visnaga*, 15, viii, 96. (A. E. E.)

PROSOPIS PICTIPES, Nyl.

- ♂ 1. Bône, on *Eryngium tricuspdatum*, 6, viii, 96.
 (A. E. E.)

PROSOPIS BREVICORNIS, Nyl.

- ♀ 1. Hippône, on *Ammi visnaga*, 12, viii, 96 and 1, viii,
 97. (A. E. E.)
 ♂ 1. Algiers, on *Magydaris tomentosa*, 5, v, 93. (A. E. E.)
 ♂ 1. Le Tarf, on *Ammi visnaga*, 26, vii, 96. (A. E. E.)
 ♂ 1. Bône, on *Daucus gummifer*, 17, viii, 96. (A. E. E.)
 ♂ 1. „ visiting *Rubus discolor*, 11, viii, 97. (A. E. E.)
 ♀ 1. Le Tarf, on *Umbelliferæ*, 27, vi, 96. (A. E. E.)

SPHECODES FUSCIPENNIS, Germ.

- ♂ 2. Médéa, Ravines near Md. Ben Omar, alt. 3,130–
 2730 ft., on *Eryngium triquetrum*, 11, vii, 93.
 (A. E. E.)
 ♂ 1. Biskra, on *Ammi visnaga*, 24, v, 97. (A. E. E.)
 ♂ 1. Bône, on *Eryngium tricuspdatum*, 6, viii, 96.
 (A. E. E.)
 ♀ 1. Médéa near Damiette, on *Eryngium triquetrum*, 5,
 vii, 93. (A. E. E.)
 ♀ 1. „ on *Mentha rotundifolia*, 19, vii, 93. (A. E. E.)
 ♀ 1. near Médéa, on *Daucus setifolius*, 30, vii, 93.
 (A. E. E.)
 ♂ ♀. Algiers, 17, iii, and 22, iv, 98. (F. D. M.)
 ♀. Constantine, 30, x, 94. (A. E. E.)

All the specimens contained in the collections are of the variety with red tibiae.

SPHECODES GIBBUS, L.

- ♂ 4, ♀ 1. Biskra, on *Ammi visnaga*, 18 and 24, v, 93 and
 23, v, 97. (A. E. E.)
 ♂. Médéa, on *Eryngium triquetrum*, 28, vi, 93.
 (A. E. E.)

SPHECODES RETICULATUS, Thoms.

♂ 2. Hippône on *Ammi visnaga*, 12 and 15, viii, 96.
(*A. E. E.*)

♀ 2. Bône 1, v, 96. (*A. E. E.*)

♀ 4. Biskra, 1, iv and 10, v, 97. (*A. E. E.*)

All the specimens of the above two species have red tibiæ and entirely red abdomen.

SPHECODES RUFICORNIS, Sich.

♂ ♀. Biskra, on the north side of the ridge beyond Beni Mora, on *Ammi visnaga*, 30, v, 97. (*A. E. E.*)

SPHECODES RUFICORNIS, Sich. var.

♂. Biskra cornlands, bordering the route des Ziban, on *Ammi visnaga*, 18, v, 93. (*A. E. E.*)

♂ 7, ♀ 1. Biskra, on *Ammi visnaga*, 15 to 30, v, 97.
(*A. E. E.*)

These specimens are rather smaller than the above, the thorax is entirely black, and the antennæ and femora nearly so. They all, however, have the pale tegulæ which separates them from the other species with the exception of *rufithorax*, Mor.

SPHECODES RUFITHORAX, Mor.

♂ 2. Biskra, on *Ammi visnaga*, 8, vii, 97. (*A. E. E.*)

♀ 1. „ 9, v, 98. (*F. D. M.*)

SPHECODES ATROHIRTUS, Per.

♂ 2. Hippône, 10, iii, 96. (*A. E. E.*)

♀ 2. Biskra, 24, iii, 94 and 3, iii, 97. (*A. E. E.*)

♂ 2, ♀ 3. Algiers, 18, iii to 29, iv, 98. (*F. D. M.*)

SPHECODES PUNCTICEPS, Thoms.

♂ 8, ♀ 1. Le Tarf, on *Feniculum vulgare*, 24 to 27, vii, 96.
(*A. E. E.*)

SPHECODES PILIFRONS, Thoms.

♀ 2. Bône, 7 and 23, iii, 96. (*A. E. E.*)

SPHECODES, sp. ?

♀ 1. Biskra, 4, iv, 97. (*A. E. E.*)

HALICTUS FORMOSUS, Dours.

- ♂ 1. Biskra, cornlands bordering the Route des Ziban, on *Ammi visnaga*, Lam., 18, v, 93. (A. E. E.)
 ♀ 1. „ near old Turkish Fort, near the Barrage Oued Biskra, on *Ammi visnaga*, 30, v, 93. (A. E. E.)
 ♀ 1. „ between Beni Mora and the road to Fontaine Chaude, on *Ammi visnaga*, 28, v, 94. (A. E. E.)
 ♀ 2. „ on *Amberboa lippii*, 8 and 11, iv, 97. (A. E. E.)
 ♀ 1. „ on *Echinops spinosus*, 8, v, 97. (A. E. E.)
 ♀ 2. „ on *Ammi visnaga*, 28 and 31, v, 97. (A. E. E.)

HALICTUS, 4-CINCTUS, Fab.

- ♂ 4. Between Médéa and Lodi, on *Centaurea calcitrapa*, 5 to 14, vii, 93. (A. E. E.)
 ♂ 1, ♀ 2. Médéa, on *Mentha rotundifolia*, 4 to 19, vii, 93. (A. E. E.)
 ♂ 2, ♀ 1. Le Tarf, on *Cynara cardunculus*, 23 and 24, vii, 96. (A. E. E.)
 ♀ 1. Constantine, on *Carduus macrocephalus*, 18, v, 95. (A. E. E.)
 ♀ 1. Aine Draham, on *Centaurea* sp., 21, vii, 96. (A. E. E.)

HALICTUS SCABIOSÆ, Rossi.

- ♂ ♀. from numerous localities and very variable in size, visiting *Ammi visnaga*, *Calamintha*, *Inula viscosa*, *Centaurea nicænsis*, and *calcitrapa*, *Scabiosa maritima*, *Onopordon macracanthum*, *Cynara cardunculus*, *Scolymus hispanicus*, *Tamarix*, *Mentha rotundifolia*. (A. E. E. and F. D. M.)

HALICTUS, sp. ?

- ♂ 1. Bône, on *Eryngium 3-cuspidatum*, 6, viii, 96. (A. E. E.)

HALICTUS VAULOGERI, Per.

- ♀ 1. Médéa, Route d'Alger, on *Centaurea nicænsis* and *Scabiosa maritima*, 26, vi, 93. (A. E. E.)
 ♀ 1. Between Médéa and Lodi, on *Centaurea calcitrapa* 12, vii, 93. (A. E. E.)

HALICTUS ALBARIUS, Per.

- ♀ 1. Biskra, between railway, Kilom. 199 and the River,
on *Amberboa lippii* D.C., 8, iv, 94. (A. E. E.)

HALICTUS ALBICINCTUS, Luc.

- ♀ 1. Bouzaréa, Algiers, 28, iv, 93. (A. E. E.)
♀ 1. Biskra, on *Ammi visnaga*, 28, v, 94. (A. E. E.)
♀ 3. „ 28, v, 94 and 8, iv, 97. (A. E. E.)

HALICTUS CLAVIPES, Drs.

- ♂. Biskra, 14, v, 98. (F. D. M.)
♂ 3. Algiers, iii and iv, 98. (F. D. M.)
♀ 1. Constantine on M'cid, 22, v, 95. (A. E. E.)

HALICTUS SEPARANDUS, Frey, G.

- ♂ 1. Tizi Ouzou, on *Calamintha*, 15, vi, 93. (A. E. E.)
♂ 2. Le Tarf, on *Cynara cardunculus*, 24, vii, 96.
(A. E. E.)

HALICTUS PLATYCESTUS, Dours. ?

- ♂ 1. Bône, 12, viii, 97. (A. E. E.)

HALICTUS CALLIZONIUS, Per.

- ♂ 2, ♀ 2. Biskra, on *Ammi visnaga*, 17 and 24, v, 93.
(A. E. E.)
♂ 2. „ on *Tamarix*, 29, iv, 97. (A. E. E.)
♂ 2. „ on *Carduus*, 7, v and 18, v, 97.
(A. E. E.)
♂ 1. Bône, 19, vii, 97. (A. E. E.)
♂ 1. Médéa, on *Centaurea calcitrapa*, 11, vii, 93.
(A. E. E.)
♂ 2. La Calle, 9, vii, 96. (A. E. E.)
♀ 1. Biskra, on a sandy footpath, 16, iv, 94. (A. E. E.)
♀ 2. Bône, one on *Crepis taraxacifolia*, 20, iv and 1, v,
96. (A. E. E.)

HALICTUS FEMORALIS, n. sp.

♀. Niger, facie elongata, capite thoraceque dense punctatis, propodeo truncato, area basali vermiculato, postice sub-rotundato. Abdomine nitido, sat dense punctato, segmentis 2, 3, 4, basi albido fasciatis, tibiis tarsisque intermediis et posticis etiam que femoribus posticis læte testaceis.

Deep black, face elongate, densely punctured, sparsely clothed with pale brownish hairs, considerably narrowed towards the apex, clypeus shining with very large scattered punctures, projecting for its entire length beyond the eyes, mesonotum punctured and clothed like the vertex, tegulæ brown, wings slightly dusky, post scutellum densely clothed with short ochreous pubescence, propodeal area vermiculately rugose bounded by a slightly raised line, abdomen elongate elliptic, shining, rather strongly punctured, depressions wide, but punctured like the rest of the segments, margins scarcely discoloured, the 2nd, 3rd and 4th segments having a well defined entire band of ochreous-white pubescence at the base, 5th segment with golden red pubescence at the apex and along the margins of the rima; intermediate tibiæ and tarsi and posterior legs with the exception of the coxæ and trochanters entirely clear testaceous.

Long. 10 mm.

♀ 2. Mechta-el-arbi, on *Cichorium intybus*, 16, v, 93.
(A. E. E.)

This very distinct species is apparently allied to those of the *scenotatulus* group.

HALICTUS, sp.?

♀ 1. Bône, 25, v, 96. (A. E. E.)

HALICTUS INTERRUPTUS, Pz.

♂ 3, ♀ 4. Médéa, on *Centaurea calcitrapa*, 12, vii, 93.
(A. E. E.)

♀ 12. Biskra, visiting *Anmmi visnaga*, *Peganum harmala*,
Traganum nultatum, *Amberboa lippii*, *Zizyphus*
lotus, *Ferula vesceritensis*, *Thapsia garganica*,
Antirrhinum ramosissimum. (A. E. E.)

HALICTUS, sp.?

Coloration of *albipes* ♂, but face much shorter, wings slightly dusky, ♂ of *bimaculatus*?

♂ 1. Bône, 10, vi, 96. (A. E. E.)

♂ 1. La Calle, 1, vii, 96. (A. E. E.)

HALICTUS VERGILIANUS, Per.

♂ 2. Biskra, in the Jardin by Fort St. Germain on a tree with blue flowers, 26, v, 93. (A. E. E.)

HALICTUS CINCTICORNIS, n. sp.

♂. Valde elongatus, griseo pubescens, antennarum articulis 4-13 basi apiceque griseo cingulatis. Capite^{et}thoraceque punctatissimis. Abdomine cylindrico, minutissime ruguloso et punctato, segmentis ventralibus 2 et 3 disco albido hirsutis. ♀. *Malachuro* simillima propodeo breviori, apice latiori, abdomine ægre punctato, maculis segmenti secundi majoribus, distinguenda.

♂. Very elongate, black, labrum, apex of the clypeus and mandibles except at the extreme base, tibiæ and tarsi except a spot on the anterior and posterior sides of the former flavous, each segment of the abdomen with a pale apical ring. Head and thorax exceedingly closely, finely and rugosely punctured, lateral angles of the cheeks above the mandibles viewed from in front somewhat prominent, face elongate much as in *albipes*, clothed in front with white, on the vertex with greyish ochreous hairs, antennæ long, joints 4 to 13 with a well marked grey pubescent basal and apical band, that of the apex very narrow on the more basal joints, hardly perceptible on 5. Mesonotum punctured and clothed like the vertex of the head, tegulæ very pale testaceous, wings hyaline, nerves testaceous, legs clothed with whitish hairs, knees tibiæ and tarsi pale, the tibiæ with a black anterior and posterior streak, propodeum with a sub-triangular and finely longitudinally rugose area, subtruncate posteriorly but with its angles rounded, entire thorax clothed with greyish hairs, sides of the propodeum very finely and diagonally striate; abdomen very elongate clothed with fine short grey hairs, exceedingly finely and closely punctured, even more so than in *malachurus* and quite distinct in this respect from *albipes* or *cylindricus*; 2nd and 3rd segments with a rather large but ill-defined lateral patch of white pubescence on each side of the base, all the segments with a rather broad pale semitransparent apical ring, 2nd and 3rd ventral segments clothed on the disc with projecting white hairs.

♀ Resembling that sex of *malachurus* but with the clypeus more produced giving the face a longer shape, and with an almost imperceptible puncturation on the basal segment of the abdomen, the surface of this segment under a Coddington lens is seen to be exceedingly finely aciculate with a very fine and rather scattered puncturation, in *malachurus* the puncturation is fine and very close. The propodeum in the species here described is shorter and wider at the apex than in *malachurus*, and the white patches of hairs at the base of the 2nd segment much more developed, the entire abdomen also is much less hairy.

Long. 8-9 mm.

♂ 1. Médéa, Ravines near Md. Ben Omar, on *Eryngium triquetrum*, *Scabiosa maritima* and *Microlophus salmanticus*, 11, vii, 93. (A. E. E.)

♂ 1. La Calle, 1, vii, 96. (A. E. E.)

♀ 1. Médéa, on *Allium*, 14, viii, 93. (A. E. E.)

♀ 1. La Calle, 1, vii, 96. (A. E. E.)

I sent a ♂ and ♀ of this species to Prof. Perez who kindly returned it as allied to *albipes*.

HALICTUS MALACHURUS, K.

♂ ♀ common, Algiers, Constantine, Médéa.

Le Tarf, Hippône. (A. E. E.)

♂ 17, vii to 15, viii—♀ 14, ii to 28, v.

♂ on *Verbena officinalis*, *Foeniculum vulgare* and *Ammi visnaga*.

♀ on *Thapsia garganica* and *Sedum cæruleum*.

HALICTUS BIMACULATUS, Dours.

♀ 2. Bône, 24, ii and 15, iii, 96. (A. E. E.)

I am indebted to Prof. Perez for this identification.

HALICTUS CAPITALIS, Per.

♀ 3. Algiers and Hussein Dey, burrowing in the bank of the main road, 4, iv, 93. (A. E. E.)

♀ 1. Algiers, base of Bouzaréa, on *Phagnalon rupestre*, 28, iv, 93. (A. E. E.)

♀ 1. Bône, 24, ii, 96. (A. E. E.)

I am indebted to Prof. Perez for this identification.

HALICTUS, sp. ?

♀ 1. Constantine, on *Alsine procumbens*, 15, vi, 94. (A. E. E.)

Small species near *capitalis*, but propodeum less truncate.

HALICTUS ARTICULARIS, Per.

♀ 1. Biskra, Col de Sfa, on *Deverra scoparia*, 26, xi, 94. (A. E. E.)

♀ 1. ,, ridge of hills N.E. of Hamman es Salabin, on *Ferula veseritensis*, 5, iv, 95. (A. E. E.)

HALICTUS VENTRALIS, Per.

- ♂ 1. Médéa, Gorges de la Chiffa, alt. 700–800 ft., on
Mentha rotundifolia and *Verbena officinalis*, 26,
vii, 93. (A. E. E.)
♂ 2. Médéa, on *Sonchus arvensis*, 28, vii, 93. (A. E. E.)
♂ 3. Constantine, "at burrows in a sandy bank," 15, x,
95. (A. E. E.)
♀ 1. Biskra, 3, iv, 97. (A. E. E.)
♀ 1. Bône, 26, iii, 96. (A. E. E.)

HALICTUS, sp. ?

- ♀ 1. Biskra, 17, v, 93. (A. E. E.)

A species peculiar in having a fine central carina on the anterior disc of the mesonotum and unusually long ventral brushes, longer than in *villosulus*, etc. (A. E. E.)

HALICTUS MEDITERRANEUS, Per. MS.

- ♂ 2, ♀ 19. Biskra, ♂ April — ♀ February and March ;
♀ visiting *Zygophyllum cornutum*, *Moricandia arvensis*,
Brassica napus, *Cleome arabica*, *Retana retam*, *Ferula*
vesceritensis. (A. E. E.)

HALICTUS, sp. ?

- ♀ 1. Biskra, 1, iii, 97. (A. E. E.)
Allied to above.

HALICTUS BREVICEPS, E. Saund.

- ♂ 2. Le Tarf, on *Feniculum vulgare*, 24, vii, 96.
(A. E. E.)
♀ 1. „ on *Daucus muricatus*, 17, vi, 96. (A. E. E.)

HALICTUS VILLOSULUS, K.

- ♂ 2, ♀ 2. Médéa, on *Verbena officinalis*, 17, vii, 93.
(A. E. E.)
♂ 4. Hippône, on *Chondrilla juncea*, 22, viii, 96. (A. E. E.)
♀ 2. Sidi Ferruch, 8, v, 93. (A. E. E.)
♀ 1. Bône, on *Crepis clausonis*, 31, xii, 95. (A. E. E.)
♀ 1. „ on *Senecio leucanthemifolius*, 15, iii, 96.
(A. E. E.)
♀ 2. Biskra, on *Ammi visnaga*, 17, v, 93; 27, v, 97.
(A. E. E.)

- ♀ 1. Biskra, on *Sonchus maritimus*, 12, iv, 97. (A. E. E.)
 ♀ 1. Constantine, on *Sonchus tenerrimus*, 8, v, 95.
 ♀ 1. " " " " 2, xi, 94. (A. E. E.)

HALICTUS PUNCTATISSIMUS, Schk.

- ♀ 1. Azazga, 2, ix, 93. (A. E. E.)
 ♀ 1. Bône, 2, iii, 96. (A. E. E.)

HALICTUS YAKOURENSIS, sp. nov.

♂. Niger nitidus, clypei apice, mandibulis, antennis subtus, tegulis, tibiis anterioribus antice, tarsis genibusque omnibus plus minus piceis, genis subprominentibus angulosis, mesonoto punctato, interstitiis lævibus, abdomine subovali, nitido, punctato. Segmentorum apicibus vix impressis.

Black, apex of clypeus, mandibles, antennæ beneath, tegulæ, front tibiæ anteriorly and all the tarsi more or less piceous; head finely and closely punctured above the insertion of the antennæ, less closely so on the clypeus. Cheeks short, slightly projecting laterally between the eyes and mandibles in a sharp angle; mesonotum shining, regularly and somewhat closely punctured, intervals between the punctures smooth, wings slightly dusky, post-scutellum hairy, legs clothed with short whitish hairs, 2nd and 3rd joints of hind tarsi slightly longer than wide, propodeum not truncate posteriorly, basal area rather small, irregularly striate, sides punctured and clothed with short greyish hairs, abdomen shining elongate ovate, with scattered greyish-white hairs, which are more abundant towards the apex, apical impressions of the segments scarcely indicated except at the sides, 1st segment rather sparsely punctured, the following more closely so, nearly smooth at their apices; beneath somewhat shining very finely rugulose and remotely punctured the punctures bearing fine hairs.

Long. 6 mm.

- ♂ 4. Forêt de Yakouren, on and over the ridge on which stands the Maison Forestier, on *Eryngium tricuspidatum*, 19, ix, 93. (A. E. E.)

This species is very distinct by its angulated cheeks and deep black colour.

HALICTUS, sp. ?

- ♀ 1. Bône, 1, v, 96. (A. E. E.)

HALICTUS, HOLLANDI, E. Saund.

- ♂ 1. Médéa, Gorges de la Chiffa, on *Mentha rotundifolia*
or *Verbena officinalis*, 26, vii, 93. (A. E. E.)
♀ 1. Bône, 26, iii, 96. (A. E. E.)

HALICTUS AGLYPHUS, Per.

- ♀ 1. Bône, visiting *Salsola kali*, 23, viii, 97. (A. E. E.)
♀ 1. Constantine, on *Thapsia garyanica*, 17, v, 95.
(A. E. E.)
♀ 2. Biskra, on *Ammi visnaga*, 30, v, 93 to 28, v, 97.
(A. E. E.)

One example has the abdomen testaceous as described by Perez, another piceous-brown, a third nearly black.

HALICTUS STRICTIFRONS, Vach.

- ♂ 1. Biskra, 10, iv, 97. (A. E. E.)
♀ 3. Bône, burrows into the vertical face of the river-
bank, 30, iv, 96. (A. E. E.)

HALICTUS SPHECODIMORPHUS, Vach. ♂?

- ♂ 1. Tizi Ouzou, on *Zizyphus lotus*, 14, vi, 93. (A. E. E.)

I submitted this specimen to Mons. Vachal, and am indebted to him for the suggestion that it may be the ♂ of his species.

HALICTUS SOROR, E. Saund.

- ♂ 1. Algiers, on *Chrysanthemum scgetum*, 28, iv, 93.
(A. E. E.)
♂ 2, ♀ 1. Constantine, on *Ecballium claterium*, 30, ix, 93.
(A. E. E.)
♂ 1 ♀ ,, on *Scdum caeruleum*, 13, v and 16,
95. (A. E. E.)
♀ 1. ,, on *Hypochaeris glabra*, 13, v, 95.
(A. E. E.)
♂ 1. Bône, 14, v, 96. (A. E. E.)
♂ 2. La Calle, 1 and 24, vii, 96. (A. E. E.)
♂ 1. Algiers, on *Phagnalon rupestre*, 28, iv, 93.
(A. E. E.)
♀ 1. ,, 24, ii, 93. (A. E. E.)
♀ 1. Bône, on *Salsola kali*, 3, viii, 97. (A. E. E.)
♀ 1. Hippône, 8, iv, 96. (A. E. E.)

HALICTUS MORIO, Fab.

- ♂ 1. Constantine, on *Ecballium claterium*, 30, ix, 93.
(A. E. E.)
♀ 3. Algiers, 5 and 19, iv, 98. (F. D. M.)

HALICTUS SIMULANS, Per.

- ♂ 1, ♀ 1. Bône, sandy ground skirting the sea-shore beyond the Seybouse, visiting *Senecio leucanthemifolius*, 4, iii, 96. (A. E. E.)
♀ 1. Bône, 9, iv, 96. (A. E. E.)
♀ 1. Algiers, 29, iv, 98. (F. D. M.)

HALICTUS DIVES, Per.

- ♀ 3. Biskra, on *Ammi visnaga*, 17, 20 and 28, v, 97.
(A. E. E.)

HALICTUS GEMMEUS, Dours.

- ♂ 2 ♀ Common: Constantine, Bône, Azazga, Le Tarf, Tizi Ouzou, Médéa, Hippône, visiting *Eryngium triquetrum*, *tricuspidatum*, *Solanum nigrum*, *Feniculum vulgare*, *Onopordum macracanthum*, *Verbena officinalis*, *Mentha rotundifolia*, *Ecballium claterium*, *Inula viscosa*, *Crepis clausonis*, *Salsola kali*, *Lotus ornithopodioides*, May to October. (A. E. E. and F. D. M.)

HALICTUS VESTITUS, Lep. var. PALLIDUS, Grib.

- ♂ 1. Biskra, on *Tamarix*, 20, iv, 97. (A. E. E.)
♂ 1. " on *Zizyphus lotus*. "Eyes in life iridescent vaguely streaked with bronzy-green and peacock-blue." 29, iv, 95. (A. E. E.)
♀ 4. " on *Ammi visnaga*, 24, v, 93 and 27, v, 97.
(A. E. E.)
♀ 1. " on *Ferula vesicritensis*, 5, iv, 95. (A. E. E.)
♀ 1. " on *Tamarix brachystylis*, 8, iv, 95. (A. E. E.)
♀ 1. " on *Nitraria tridentata*, 11, v, 97. (A. E. E.)
♀ 1. " on *Antirrhinum ramosissimum*, 21, iii, 97.
(A. E. E.)
♀ 1?. Bône, on *Salsola kali* (much rubbed), 20, viii, 97.

HALICTUS, sp. ?

- ♀ 1. Médéa on *Asparagus officinalis*, 28, vi, 93. (A. E. E.)

HALICTUS MUCOREUS, Ev.

- ♂ 6. Biskra, on *Ammi visnaga*, 17 and 28, v, 97 and 8, vii, 97. (*A. E. E.*)
 ♀ 4. „ on *Ammi visnaga*, 17, iv to 29, v, 97. (*A. E. E.*)
 ♀ 1. „ on *Amberboa lippii*.
 “Eyes in life indistinctly streaked with bronze-green and peacock-blue.” 11, iv, 95. (*A. E. E.*)
 ♀ 1. „ visiting *Peganum harmala*, 12, iv, 95. (*A. E. E.*)
 ♀ 2. „ on *Limoniasstrum guyonianum*, 27, iv, 95 and 6, v, 97. (*A. E. E.*)
 ♀ 2. Médéa, on *Centaurea calcitrapa*, 12 to 21, vii, 93. (*A. E. E.*)
 ♀ 1. „ on *Mentha rotundifolia*, 11, viii, 93. (*A. E. E.*)

ANDRENA FLESSÆ, Pz.

- ♀ 1. Algiers, Colonne Voirol, 4, v, 93. (*A. E. E.*)
 ♀ 1. Bône, on *Euphorbia helioscopia*, 4, v, 96. (*A. E. E.*)
 ♂ 2. Constantine, on *Ferula communis*, 14, v, 95. (*A. E. E.*)
 ♂ 2, ♀ 1. „ visiting *Rapistrum rugosum* and *Diplotaxis muralis*, 22, v, 95. (*A. E. E.*)
 ♀ 2. Biskra, on *Moricandia arvensis*, 10, iii and 14, iv, 94. (*A. E. E.*)
 ♀ 1. „ on *Diplotaxis*, 11, ii, 97. (*A. E. E.*)
 ♀ 1. „ on *Brassica napus*, 27, ii, 97. (*A. E. E.*)

ANDRENA ASPERRIMA, Per.

- ♂ 1. Biskra, on *Ammi visnaga*, 28, v, 94. (*A. E. E.*)

ANDRENA EPHIPIUM, Spin.

var. entirely black.

- ♂ 1. Biskra, claybank of the Oued, 26, ii, 94. (*A. E. E.*)
 ♂ 1. „ 19, iv, 95. (*A. E. E.*)
 ♀ 1. „ on *Moricandia fuscata* and *arvensis*, 10, iii, 94. (*A. E. E.*)

var. with red thorax.

- ♀ 1. Biskra, visiting *Moricandia arvensis*, 25, iii, 95. (*A. E. E.*)
 ♀ 1. „ on *Ammi visnaga*, 29, v, 94. (*A. E. E.*)
 ♀ 2. „ 12, ii and 26, iii, 97. (*A. E. E.*)

Dr. Longstaff took the ♂ of this species at flowers of *Euphorbia guyoniana* and *Spergula* sp. February and March 1905.

ANDRENA PILIPES, Fab.

♂ 1. Hippône, 10, iii, 96. (*A. E. E.*)

♀ 1. Le Tarf, on *Centaurea napifolia*, 27, vi, 96. (*A. E. E.*)

ANDRENA MORIO, Brullé.

var. entirely black.

♀ 1. Biskra, on *Ammi visnaga*, 24, v, 93. (*A. E. E.*)

♀ 1. Médéa, on *Eryngium triquetrum*, 27, vi, 93.
(*A. E. E.*)

♀ 1. Biskra, 26, iii, 97. (*A. E. E.*)

var. collaris.

♂ 1. Biskra, on *Ammi visnaga*, 25, v, 93. (*A. E. E.*)

♂ 1. La Calle, 8, vii, 96. (*A. E. E.*)

♂ 1. Biskra, visiting *Atractylis serratuloides*, 6, v, 97.
(*A. E. E.*)

♀ 1. Fontaine Chaude, on *Euphorbia guyoniana*, 17, iii,
94. (*A. E. E.*)

♀ 1. Biskra, 3, iv, 97. (*A. E. E.*)

♀ 1. Médéa, on *Eryngium triquetrum*, 11, vii, 93.
(*A. E. E.*)

♀ 1. Biskra, on *Ammi visnaga*, 25, v, 93.

A curious specimen with red femora and red propodeal area. (*A. E. E.*)

ANDRENA FUNEBRIS, Pz.

♀ 1. Biskra, near the conduit and mill-stream between
Fort St. Germain and the railway, 5.15 to
6.45 a.m., on *Ammi visnaga*, 17, v, 93. (*A. E. E.*)

♀ 1. Médéa, near Damiette, on *Onopordon macracanthum*,
5, vii, 93. (*A. E. E.*)

♀ 1. Biskra, Route d'Alger, on *Centaurea nicænsis*, and
Scabiosa maritima, 26, vi, 93. (*A. E. E.*)

♀ 1. (stylopized.) Constantine, on Meçid, 23, v, 94.
(*A. E. E.*)

ANDRENA BIMACULATA, K.

♀ 2. Biskra, on *Periderca fuscata*, 8, ii, 94 and 2, v,
97. (*A. E. E.*)

♂ 1, ♀ 4. „ on *Tamarix*, 14, v, 94 and 28 and 29,
iv, 95. (*A. E. E.*)

ANDRENA THORACICA, F.

- ♀ 2. Médéa, on *Eryngium triquetrum*, 27, vi, 93.
(A. E. E.)
♀ 2. Bône, 2 and 16, iii, 96. (A. E. E.)
♀ 1. „ visiting *Senecio leucanthemifolius*, 4, iii, 96
(A. E. E.) (very dark red hairs on the
thorax).

ANDRENA NIGRA, n. sp.

♀. Nigra, tarsi omnibus tibiisque posticis obscure testaceis, area propodeali sub-lævigata, alis infumatis, abdomine minute ruguloso remote punctato, segmentorum apicibus testaceis.

♀. Black, clothed with black hairs, those on the sides of the propodeum and of the thorax below the wings slightly greyish, all the tarsi and the tibiæ of the hind-legs when the light passes through them seem to be testaceous, calcaria pale, in form and size resembling *rosæ*, Pz. Antennæ with the 2nd joint of the flagellum rather longer than the 3rd and 4th taken together, clypeus finely rugulose and strongly punctured. Head and thorax including the propodeum densely clothed with black hairs, those of the propodeum and vertex longer than those of the thorax; propodeal area nearly smooth, wings smoky-brown, abdomen very finely rugulose with a fine scattered superficial puncturation, apices of the segments testaceous, in certain lights the abdomen seems to have a very slight bluish tinge, apical fimbria black, dorsal valve closely punctured, its margins smooth; beneath punctured, the segments with black apical fringes.

Long. 12 mm.

- ♀ 1. Bône, visiting *Diplotaxis*, 30, iv, 96. (A. E. E.)

Rather like a black *rosæ* r. *trimmerana* in general form, but its sculpture and the comparative lengths of the antennal joints will distinguish it easily.

ANDRENA BIPARTITA, Brullé.

- ♂ 3, ♀ 4. Biskra on *Diplotaxis* and *Moricandia arvensis*,
3, ii to 30, iii, 97. (A. E. E.)

ANDRENA FLOREA, F.

- ♀ 1. Colonne Voirol, on *Bryonia*, 5, v, 93. (A. E. E.)
♀ 1. Hippône, 16, v, 96. (A. E. E.)
♀ 1. Algiers, 4, iv, 98. (F. D. M.)

ANDRENA LEUCOPHÆA, Luc.

- ♂ 2, ♀ 2. Algiers, 17 to 28, iii, 98. (F. D. M.)

ANDRENA DERIVATA, Perez.

- ♂ 2 ♀. Bugeaud, alt. 2,750 feet, on *Senecio leucanthemi-folius*, 17, ii, 96. (*A. E. E.*)
 ♀ 3. Bône, on *Senecio leucanthemifolius*, 15, ii and 6, iii, 96. (*A. E. E.*)
 ♀ 2. Algiers, 17, ii and 9, iii, 93. (*A. E. E.*)

ANDRENA ROSÆ, Pz.

race *Trimmerana*.

- ♂ 2. Colonne Voirol, on *Maydaris tomentosa*, 5, v, 93. (*A. E. E.*)
 ♀ Algiers, 9, iv, 89. (*F. D. M.*)

Dr. Longstaff took it at Biskra, on flowers of *Euphorbia guyoniana*, 7, iii, 05. (*A. E. E.*)

ANDRENA NIGROÆNEA, K.

- ♂ 1, ♀ 1. Biskra, on *Anmi visnaga*, 15, v, 97 and 25, ii, 94. (*A. E. E.*)
 ♀ 3. Algiers, 29, iii to 19, iv, 98. (*F. D. M.*)

Dr. Longstaff took this species on *Retama retam*, at Biskra, 26, ii, 95; on *Spergula* sp. at El Ontaia, 1, iii, 05, and on *Euphorbia guyoniana* in Kabylia, 18, iii, 05.

ANDRENA HIRTICORNIS, Per.

- ♂ 1. Algiers, iii, 98. (*F. D. M.*)

ANDRENA GWYNANA, K.

- ♂ 1, ♀ 2. Constantine, on *Ferula communis*, 10 and 14, v, 95. (*A. E. E.*)
 ♀ 1. Algiers, 17, ii, 93. (*A. E. E.*)
 ♀ 1. El Biar, on *Compositæ*, 20, iii, 93. (*A. E. E.*)

ANDRENA TESTACEIPES, n. sp.

Nigra fulvopilosa, antennarum articulo tertio, duobus sequentibus simul sumptis longiore, abdomine testaceo basi, maculâ dorsali segmenti secundi, apicibusque segmentorum sequentium nigris fimbriâ anali aureâ, tibiis tarsis-que læte testaceis, aureo-hirtis.

♀. Black. Head and thorax clothed with pale brownish hairs, those of the scutellum and post-scutellum of a brighter fulvous tint. Abdomen with the apices of the segments widely, and a large patch on each side of the 2nd segment and a smaller one on each side of the third testaceous, apical fimbria golden, legs with the hind tibiæ

and all the tarsi clear testaceous-yellow, scopæ golden. Clypeus finely rugulose, punctured, face above the antennæ striate, antennæ with the 2nd joint of the flagellum longer than the next two together but not so long as the next three, 3rd and 4th transverse, 5th slightly longer than the 4th, the rest subquadrate. Mesonotum finely rugulose but slightly shining, finely punctured. Wings with a yellowish tinge, nervures testaceous, propodeum finely rugulose with rather close and shallow and very large punctures, abdomen shining very finely and somewhat remotely punctured, segments beneath fringed with ochreous golden hairs.

Long. 9 mm.

♀ 2. Constantine, on *Sonchus tenerrimus*, 20, v and 1, vi, 95. (*A. E. E.*)

ANDRENA TUBERCULIFERA, Per.

♀ 1. Le Tarf, 24, vi, 96. (*A. E. E.*)

♀ 1. Bône, on *Diplotaxis*, 6, iv, 96. (*A. E. E.*)

♂ 1, ♀ 1. Algiers, 18, iv and 18, iii, 98. (*F. D. M.*)

ANDRENA ALBOCINEREA, n. sp.

♂. Niger, albohirtus, antennarum articulo 4^{to} et sequentibus subquadratis, 3^{to}, 4^{to} et dimidio quinti subæquali. Mesothorace opaco, punctato, abdominis segmentis basi punctatis apicibus impressis nitidis, segmento basali pilis longis suberectis, reliquis pilis brevibus adpressis vestitis.

♂. Black, clothed with long white hairs, those near the orbits of the eyes of a slightly sooty colour, and those of the mesonotum with a greyish tinge, wings hyaline, nervures pale testaceous. Clypeus so densely clothed with snowy-white hairs that its sculpture and form are invisible but regarded anteriorly, with the insect upside-down it is seen to be semicircularly emarginate, and the labrum bears a transverse emarginate tubercle. Antennæ rather short, the 2nd joint of the flagellum almost as long as the 3rd and $\frac{1}{2}$ of the 4th together, those from the third upwards subquadrate, if anything appearing a little longer than wide, mesonotum dull, finely and rather closely punctured, the punctures distant from each other 3 or 4 of their own diameters, the sculpture, however, is exceedingly difficult to see as the hairing is so dense; legs sparingly clothed with white hairs, propodeal area finely rugulose, abdomen shining, 1st segment sparsely clothed with long erect white hairs those of the following short and semi-adpressed, 2nd and following segments closely and finely punctured at the base, their apices widely impressed

and very shining, the extreme base of the impressions finely and remotely punctured, the apices slightly discoloured, and of a somewhat bronzy-brown colour, apical fimbria brownish-golden, segments beneath clothed with very long hairs, eighth ventral segment subtruncate, its stem densely fringed towards the apex with long hairs, making a fan-shaped expansion, regarded sideways slightly elbowed, armature with rather elongate straight stipites, their basal angles only slightly produced.

Long. 9-10 mm.

♂ 7. Biskra, near the dunes and on the left of the Route de Tougourt, on *Periderea fuscata*, 8, ii, 94 and 25, i, 95. (*A. E. E.*)

In appearance closely resembling the ♂ of *nycthemera* and of *florentina*, but the shorter antennæ and very different armature distinguish it at once from the former and the white hairs and the absence of black velvety pubescence at the base of the abdominal segments from the latter.

ANDRENA FLORENTINA, Magr.

♂ 3. Bône, 21, i, 16 and 24, ii, 96. (*A. E. E.*)

I am indebted to Professor Perez for this information.

ANDRENA ALBOHIRTA, n. sp.

♂. Niger, dense albido hirsutus, antennarum flagello, abdominis segmentorum apicibus, tarsorum apicibus venisque alarum testaceis, abdomine ruguloso, opaco.

Black, entirely covered with whitish hairs, erect on the head and thorax and more or less adpressed towards the apex of the abdomen, apices of the segments, the flagellum of the antennæ beyond the 2nd joint, the nervures of the wings and the apices of the tarsi pale testaceous. Second joint of the flagellum as long as the 3rd and 4th taken together, 3rd much longer than the 2nd. Mesonotum shining, but so hidden by the hairs that its surface is hardly visible, abdomen as seen between the hairs finely rugulose, the apices of the segments bearing a dense apical band of white hairs, apical fimbria ochreous, abdomen beneath with bright golden apical fringes, 8th ventral valve slightly widened at the apex, subtruncate, its stem rather narrow, with a fringe of short hairs along the sides, armature with the lobes produced into very strong teeth. I communicated this species to Professor Perez, who returned it to me as allied to his *A. farinosa*.

Long. 7-8 lines.

- ♂ 4. Biskra, on the high flat-topped ridge beyond
Gaddecha, on *Zygophyllum cornutum*, 10
and 12, ii, 94. (*A. E. E.*)
♂ 1. „ 5, ii, 97. (*A. E. E.*)

ANDRENA, sp. ? (*stylopized*).

- ♂ 1. Algeria, 28, iii, 07. (*F. D. M.*)

ANDRENA FLAVIPES, Per.

- ♂ 1, ♀ 2. Bône, 21, i and 9 to 17, iii, 96. (*A. E. E.*)
♀ 1. Constantine, sandy banks, 17, iv, 94. (*A. E. E.*)

ANDRENA CREBERRIMA, Per.

- ♀ 1. Biskra, on *Amberboa lippii*, 8, iv, 97. (*A. E. E.*)

ANDRENA, n. sp.

- ♀ 1. Constantine, visiting *Enanthe fistulosa*, 10, v, 95.
(*A. E. E.*)

Apparently very distinct by the strongly punctured bases and deeply impressed apices of the segments which bear lateral fringes of white hairs, but from a single ♀ I refrain from describing it.

ANDRENA MEGACEPHALA, Sm.

- ♂ 1. Bône, behind the Kasbah, 15, iii, 96. (*A. E. E.*)
♀ 1. Biskra, 1, iii, 97. (*A. E. E.*)

ANDRENA BUCEPHALA, Steph.

- ♂ 1. Bône, 16, iii, 96. (*A. E. E.*)
♂ 1. Algiers, 18, iv, 98. (*A. E. E.*)

ANDRENA, sp. ? near BUCEPHALA.

- ♂ 1. Biskra, 1, iii, 97. (*A. E. E.*)

This ♂ is somewhat worn and therefore not in a condition to be described.

ANDRENA STRICTA, n. sp.

Rosæ var. *trimmeranæ* colore similis, sed angustior, abdomine opaco, antennarum articulo tertio duobus sequentibus simul sumptis maris duplo feminae triplo longiore abdominis segmentis primo et secundo rufo-fusco hirtis, quarto et sequentibus nigro-hirsutis; pedibus gracilibus, scopis breviter hirsutis.

Like *Rosæ r. trimmerana* in colour but narrower and in form more resembling the ♀ of *bucephala*, and evidently belonging to that group by the form of the antennæ. I thought at first it was identical with *macilenta*, Perez, but of that species the author says, "abdomen très luisant" whereas in this species it is duller than in *rosæ*. The 2nd joint of the flagellum in the male is about equal in length to the following 2 together, in the ♀ about as long as the following 3. The rest of the joints slightly longer than broad in the ♂, distinctly so in the ♀, hairs of the face in the ♂ brown margined with black, in the ♀ black throughout, thorax clothed with bright brown hairs those of the sides paler, propodeal area very finely sculptured its margins slightly shining, abdomen narrow, not wider than the thorax in the ♀, nearly dull, finely rugulose with a remote puncturation which recalls that of the *humilis* group; 1st and 2nd segments sparingly clothed with long brown hairs, apices of the segments narrowly discoloured, the 2nd and 3rd in fresh examples with an apical fringe of brown hairs; 4th, 5th, and 6th segments clothed with black hairs, hind tibiæ very narrow, scopæ very small. Process of 8th segment in the ♂ rather short and wide, sharply elbowed near the base, its apex truncate, and its sides fringed with hairs which are shorter towards the apex, armature with its lobes slightly produced in front.

Long. 10-12 mm.

- ♀ 1. Constantine, 21, v, 95. (A. E. E.)
 ♀ 1. Bône, 2, iii, 96. (A. E. E.)
 ♂ 27, ♀ 4. Algiers, 15, iii and 21, iv, 98. (F. D. M.)

ANDRENA, sp. ? (*schmiedeknechti affinis*).

- ♀ 1. Algiers, 14, iv, 98. (F. D. M.)

This specimen is closely allied to *schmiedeknechti* but has the 3rd and following segments clothed with black hairs, in this respect it more closely resembles *nigrifrons*, Smith, but lacks the pale bands at the apices of the 2nd, 3rd, and 4th segments; as I do not feel sure that it may not be a colour variety of one or other of these closely allied species I refrain from describing it.

ANDRENA NIGRO-OLIVACEA, Drs.

- ♂ 1. Bône, visiting *Crepis clausonis*, 31, xii, 95.
 (A. E. E.)
 ♂ 1. Algiers, 14, iv, 95. (F. D. M.)
 ♀ 5. ,, 19 and 31, iii, 98. (F. D. M.)

ANDRENA LIVENS, Per.

- ♂ 1, ♀ 1. Constantine, visiting *Crepis taraxascifolia*, 21, v, 95. (A. E. E.)

ANDRENA SENEACIONIS, Per.

- ♂ 1. Algiers, on *Asteriscus maritimus*, 17, iv, 93. (A. E. E.)

- ♂ 2. Bône, 23, iii and 7, iv, 96. (A. E. E.)

- ♀ 1. Algiers, 14, iv, 98. (F. D. M.)

ANDRENA CURTIVALVIS, Morice.

- ♂ 1, ♀ 9. Algiers, 24, iii and 6, iv, 98. (F. D. M.)

ANDRENA GIRAUDI, Drs.

- ♂ 1. Algiers, 14, iv, 98. (F. D. M.)

ANDRENA MOLESTA, Per.

- ♂ 1. Algiers, 31, iii, 98. (F. D. M.)

ANDRENA, sp. (? *imminuta*, Per.)

- ♂ 1. Algiers, 18, iii, 98. (F. D. M.)

ANDRENA DOURSIANA, Duf.

- ♂ 1. Algiers, 16, iii, 98. (F. D. M.)

Agrees well with Dours' description of the ♂ of this species, the clypeus shows no sign of a spine such as characterises *micronata*, Mor., and *fuscoprasina*, Per.

ANDRENA, n. sp. ?

- ♂ 1. Algiers, 17, iii, 98. (F. D. M.)

In colour and sculpture resembling the above exactly, but with very much shorter antennæ, the joints of which are only a trifle longer than wide, it must also be closely allied to *fuscoprasina*, Per., but the clypeus, which is white throughout, lacks the black spine. From a single specimen taken on the same day and together with *doursiana* I think it is wiser not to name it.

ANDRENA FERRUGINEICRUS, Drs.

- ♂ 3. Biskra, on *Periderca fuscata*, 21, ii, 95. (A. E. E.)

- ♀ 3. „ on *Moricandia cinerea*, 16 and 17, ii, 94. (A. E. E.)

- ♂ 5. „ on *Brassica napus*, 27, ii, 97. (A. E. E.)

ANDRENA, sp. ? (*an prec. dist?*)

♀ 1. Biskra, on *Brassica napus*, 27, ii, 97. (*A. E. E.*)

ANDRENA, sp. ?

♂ 1. Constantine, 13, vi, 98. (*F. D. M.*)

ANDRENA CIRCINATA, Drs.

♂ 3. Algiers, 13, iii to 11, iv, 98. (*F. D. M.*)

♂ 7. Bouira, 2, v, 98. (*F. D. M.*)

ANDRENA, sp. ?

♂ 1. Algiers, 30, iv, 98. (*F. D. M.*)

Apparently allied to the above but much more shining and with a very large and deeply punctate abdomen the segments of which are convex, and have apical bands of rather long ochraceous hairs, that of the 2nd and 3rd segments interrupted, that of the first only showing at the sides; antennæ rather short, 2nd joint of flagellum about twice as long as the third, the rest subquadrate. Head thorax and legs clothed with ochreous hairs.

ANDRENA RUFIVENTRIS, Lep.

♂ 8. El Guerrah, 3, v, 98. (*F. D. M.*)

♀ 1. Constantine, 13, vi, 98. (*F. D. M.*)

ANDRENA, sp. ?

♀ 1. Algiers, 27, iv, 98. (*F. D. M.*)

Resembling *distincta*, Lue. in general appearance but with the abdomen more shining and much more finely punctured, the punctures so fine as to be only observable under a strong lens.

ANDRENA LEUCOLIPPA, Per.

♂ 1. Algiers, on *Asteriscus maritimus*, 28, iv, 93.
(*A. E. E.*)

♂ 4. ,, 27 and 30, iv, 98. (*F. D. M.*)

ANDRENA BELLIDIS, Per.

♂ 1. Constantine, on *Anacyclus clavatus*, 10, v, 95.
(*A. E. E.*)

♀ 1. ,, 10, vi, 95. (*A. E. E.*)

♂ 7, ♀ 2. El Guerrah, 3, v, 98. (*F. D. M.*)

ANDRENA MICROTHORAX, Per.

- ♀ 1. Biskra, on *Moricandia cinerea*, 16, ii, 94. (A. E. E.)
♀ 1. „ on *Moricandia arvensis*, 10, ii, 97. (A. E. E.)
♀ 1. „ „ „ 1, iii, 97. (A. E. E.)

ANDRENA, sp. ?

- ♀ 1. Biskra, 12, iv, 97. (A. E. E.)

Abdomen densely clothed with adpressed pale hairs.

ANDRENA NIGROCYANEA, n. sp.

Nigra, abdomine cyaneo tincto, maris clypeo albo, nigro bipunctato, vertice striato, flagelli articulo secundo maris tertio quartoque simul sumptis fere æquali, feminae paullo longiore, abdomine nitido segmentis 2-4 apice albo fasciatis fimbria anali aureâ. Scopis albidis.

♂ ♀. Black, head and thorax clothed with greyish-white hairs, clypeus of ♂ white with two little black discal spots, face of that sex densely clothed with long white hairs, abdomen with the posterior margins of the segments testaceous, 2nd and following segments with lateral fringes of white hairs in the ♂, with well-defined white bands in the ♀, apical fimbria pale golden, scopæ white, calcaria and apices of the tarsi pale.

♂. Clypeus punctured vertex and face above the antennæ striate antennæ with the 2nd joint of the flagellum scarcely so long as the 3rd and 4th together, the 4th longer than the 3rd and like the remainder of the joints subquadrate: mesonotum slightly shining finely rugulose and somewhat remotely punctured, wings slightly clouded, nervures brown, propodeal area ill-defined, slightly crenate at the extreme base, and rather smoother than its surroundings which are finely rugulose and hairy; abdomen shining, especially the basal segment, with a slight tinge of bronziness or blue in some lights, 2nd and following segments with very narrow lateral bands, microscopically rugulose and very finely punctured, apical margins slightly impressed and smoother, beneath punctured on the apical portions of the segments, ventral valve elongate, slightly widened and subtruncate at the apex, armature with the basal angles of the stipites largely rounded, the blades of the stipites very concave, sagittæ much swollen at the base.

♀. Differs from the ♂ in the ordinary sexual characters and also in having the 2nd joint of the flagellum longer than the 3rd and 4th together, the scutellum more shining than the mesoscutum and with only a very few punctures, in sharp contrast with the more closely

punctured portion of the mesoscutum above it, propodeal area scarcely indicated, very finely rugulose, abdomen sculptured much as in the ♂, but the rugulosities rather stronger, and there is scarcely any indication of metallic reflections, white bands of the segments well defined that of the second interrupted, segments beneath with very long rather dense fringes.

Long. 8 mm.

- ♂ 2. Biskra, on *Periderea fuscata*, 8, ii, 84. (A. E. E.)
 ♂ 1, ♀ 1. „ on *Brassica napus*, 27, ii, 97. (A. E. E.)

ANDRENA VARIABILIS, Sm.

- ♂ 1. Between Médéa and Lodi, on *Centaurea calcitrapa*, 11, vii, 93. (A. E. E.)
 ♀ 1. Lodi, on *Eryngium triquetrum* (stylopized), 13, vii, 93. (A. E. E.)

ANDRENA LABIALIS?

- ♂ 1. Algiers, 13, iv, 93. (A. E. E.)

ANDRENA, sp.? (*stylopized*).

- ♀ 1. Biskra, 24, v, 93. (A. E. E.)

ANDRENA RHYSSONOTA, Per.

- ♀ 1. Sidi Ferruch, on *Magydaris tomentosa*, 8, v, 93. (A. E. E.)

ANDRENA FORCIPATA, n. sp.

♂. Niger albido-pilosus, opæus, remote punctatus, antennarum articulo tertio tribus sequentibus simul sumptis parum longiore, abdominis segmentis, apicè late impressis; forcipum exteriorum lobis antice carinato-reflexis bene distinguendus.

♂. Large, about the size of and somewhat resembling *hatterfiana* and *nobilis*, black, clypeus and cheeks at its side yellow, the former with 2 small black discal spots, antennæ with the 2nd joint of the flagellum as long as the following 3 together the rest subquadrate, head and thorax rather densely clothed with grey hairs which have a slightly ochreous tinge on the mesonotum, dull, finely rugulose and with a very fine remote puncturation, wings with a smoky tinge as they approach the apex, nervures dark brown, propodeum rugulose, its basal area very finely and regularly so, with an impressed dorsal line. Abdomen nearly dull, finely rugulose, and remotely and finely punctured, the segments widely impressed

and slightly discoloured at the apex, clothed sparingly with rather long greyish hairs, the 3rd, 4th and 5th also with a slight lateral fringe, segments beneath finely aciculate their margins with fringes of rather long white hairs. 8th ventral segment subtriangular at the base, produced into a somewhat short, parallel-sided, apical process, hardly widened at the extreme apex which is truncato-emarginate, sides fringed with golden hairs. Armature of very unusual form, the lobes of the stipites being very large and their anterior margins strongly reflexed laterally, the blades are scarcely longer than the lobes, narrow and deeply channelled along the sides, *sagittæ* narrow and pointed.

Long. 13 mm.

♂ 2. El Guerrah, 3, v, 98. (*F. D. M.*)

This species is most like *nobilis*, Mor., but the shorter antennæ and the proportionately longer 2nd joint of the flagellum as well as the form of the armature will distinguish it easily.

ANDRENA MERIMNA, n. sp.

Nigra, subopacæ, vertic striato, antennarum articulo tertio in utroque sexu tribus sequentibus simul sumptis æquali abdomine minute ruguloso segmentorum apicibus albo fimbriatis fascia segmenti basalis late interrupta fimbria anali aureo fusca, scopis albidis.

A rather obscure-looking species but one which I fail to find described, it somewhat resembles a very large member of the *minutula* group with entire abdominal bands.

♂. Black, head and thorax clothed with greyish-white hairs, clypeus shining strongly and remotely punctured the surface between the punctures finely rugulose with traces of longitudinal striæ, face above the antennæ striate, 2nd joint of the flagellum as long as the next 3 together, 3rd and 4th slightly wider than long, rest of the joints subquadrate; mesonotum finely rugulose with a superficial remote puncturation, its hairs inclining to ochraceous in colour, propodeal area rugulose: abdomen finely rugulose, somewhat shining, sparingly clothed with semierect white hairs those towards the sides and on the first two segments longest, apices of the segments discoloured, 2nd and following with a rather thin fringe-like band of white hairs, these bands more developed at the sides and on the apical segments, beneath with the apices fringed with very long hairs, apical ventral valve narrow, slightly dilated and entire at the apex fringed with long golden hairs in a fan-like

form, armature dark brown. Teeth at the base of the stipites wide and well developed, extreme apex of the apical dilatation of each stipes slightly emarginate, sagittæ much inflated at the base, testaceous-brown.

♀. Very like the ♂, clypeus duller and more clearly striate. 2nd joint of the flagellum as in the ♂ about equal in length to the next 3 taken together, mesonotum dull and finely rugose with a very fine and remote superficial puncturation, abdomen rather narrow, sculptured as in the ♂ but the bands of the segments much more conspicuous, the basal segment also having white hairs at the sides, apical fimbria brown.

Long. 8-9 mm.

Biskra, ♂ 1, ♀ 1, on *Moricandia arvensis*, ♂ 11, ii, 94 and ♀ 3, ii, 97. (*A. E. E.*)

ANDRENA NIVEOZONATA, n. sp.

Nigra, nitida, capite thoraceque albido hirsutis, abdominis apicibus segmentorum læte albo fasciatis fimbria anali aureâ. ♂. Antennarum articulis tertio, quarto quintoque subæqualibus, ♀ articulo tertio, quarto quintoque simul sumptis longiore.

Black, head and thorax clothed with whitish hairs, abdomen very shining, segments with very clearly defined white apical bands, nervures of the wings pale testaceous, the tarsi testaceous in the ♂.

♂. Face densely clothed with snowy-white hairs, vertex striate, antennæ with the 2nd, 3rd and 4th joints of the flagellum subequal, slightly longer than wide, mesonotum shining, finely and remotely punctured, clothed with nearly white hairs which have however a slight ochreous tinge, propodeal area rather more shining than its surroundings, abdomen shining finely and remotely punctured, the apices of the segments slightly discoloured and bearing a narrow well-defined band of white hairs—legs clothed with white hairs.

♀. Face clothed with white hairs, clypeus closely and largely punctured, antennæ testaceous towards the apex, with the 2nd joint of the flagellum longer than the following 2 together, vertex striated, mesonotum very shining, remotely punctured clothed with almost white hairs having only a very slight ochreous tinge, propodeum dull, its basal area slightly shining and very finely rugulose; abdomen deep black, finely punctured and very shining, the first 4 segments each bearing a rather broad, well defined band of snow-white hairs, the 5th and sides of the 6th more or less golden, beneath finely punctured the segments with somewhat inconspicuous apical fimbriæ, legs clothed with white hairs.

Long. 6-8 mm.

- ♂ 2, ♀ 1. Biskra, 9, iii, 95 and 6, iv, 97. (*A. E. E.*)
♀ 1. „ visiting *Tamarix brachystylis*, 4, iv, 95.
(*A. E. E.*)

This species belongs, I should say, to the *argentata* group.

ANDRENA RUBROSIGNATA, n. sp.

♂. Niger, abdomine macula magna dorsali testacea ornato, antennarum articulus tertius quarto duplo longior, mesonotum læve, punctatum, abdomen nitidum, segmentis secundo tertioque apice fimbria laterali, quarto fimbria completa aureis ornatis.

♂. Head and thorax black, antennæ beneath testaceous, abdomen with the centres of the 2nd and 3rd segments and the apex of the 1st testaceous, and there is also occasionally a testaceous line down the centre of the 1st; hind tibiæ except a stain on their anterior and posterior faces, and all the tarsi pale testaceous. Clypeus closely punctured, face clothed with pale ochreous hairs, 2nd joint of the flagellum twice as long as the 3rd, 3rd much shorter than the 4th which like the following joints is subquadrate, face above the antennæ striate; mesonotum smooth, shining, punctured, clothed rather sparingly with ochreous hairs, wings slightly brownish, propodeum slightly shining, finely and indefinitely rugose, abdomen shining, finely punctured, with very short lateral fringes of pale ochreous hairs on the 2nd and 3rd segments and an entire fringe on the 4th, apical fimbria pale golden, legs clothed with ochreous hairs.

Long. 8 mm.

- ♂ 2. Constantine, hovering over and alighting on a
footpath, 15, v, 95. (*A. E. E.*)
♂ 5. „ 13 to 17, vi, 08. (*F. D. M.*)

This species of which only the ♂ has been sent home rather resembles *lucens*, Imh., but the smooth surface of the thorax which in *lucens* is finely rugulose, will distinguish it at once, as well as the red-coloured disc of the abdomen.

ANDRENA LUCENS, Imh.

- ♂ 7, ♀ 6. Algiers, 17, iii to 30, iv, 08. (*F. D. M.*)

ANDRENA, n. sp. ?

- ♂ 2. Algiers, 29, iii to 9, iv, 98. (*F. D. M.*)

A species apparently so closely allied to the preceding that I refrain from describing it on one sex only. One of the specimens

is in very fine condition and the thorax is more densely clothed with longer and brighter brown hairs than in *lucens*, and its sculpture is coarser giving it a duller appearance. The form of the 7th ventral segment also is different, viewed sideways in this species it is straight, in *lucens* it is elbowed.

ANDRENA MAYETI, Per.

♀ 4. Biskra, on *Ammi visnaga*, 18, v, 93 and 28 and 29,
v, 94. (*A. E. E.*)

♀ 2. „ 27, v and 2, vi, 98. (*F. D. M.*)

ANDRENA NIGRIVENTRIS, n. sp.

♀. Caput et thorax nigra, albido hirsuta, hirsutiae supra subochracea, antennis subtus apiceque testaceis, articulo tertio, tribus sequentis simul sumptis subæquali, alis hyalinis, nervuris testaceis. Abdomen supra testaceum, apice nigro, subtus nigrum; pedes nigri, tarsorum apicibus testaceis.

♀. Head and thorax black clothed with whitish hairs, those of the vertex and mesonotum slightly tinged with yellow, apex and underside of the antennæ pale testaceous, tegulæ pale, wings hyaline, nervures pale testaceous, abdomen above testaceous, its extreme base and the fifth segment black; beneath with the 2nd and following segments black, legs black, calcaria and apices of the tarsi pale. Rather short and compact in form, face densely clothed with more or less decumbent white hairs, clypeus closely and rugosely punctured, labrum with a flat shining lamelliform tubercle, orbital furrows clothed with dense golden pubescence, antennæ with the 2nd joint of the flagellum nearly as long as the next 3 together, mesonotum very slightly shining closely punctured, propodeal area well defined, with a central sulcature which does not reach the apex, there is almost an indication of diagonal rugosities on each side of it, beyond the area the propodeum is very finely rugulose and punctured, abdomen finely and closely punctured, slightly shining, microscopically aciculate between the punctures, 2nd segment with a short band of white hairs on each side, 3rd and 4th with entire bands, anal fimbria whitish, golden at the extreme apex, segments beneath fringed with pale hairs, scopæ of tibiæ white.

Long. 9 mm.

♀ 1. Hamman es Salahin, on *Picridium vulgare*, 9, iv,
97. (*A. E. E.*)

ANDRENA MINUTULA, group of.

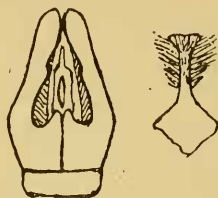
This exceedingly difficult section of the genus requires a complete revision, and as I have neither the material nor opportunity to prepare one I am obliged simply to indicate the number of forms contained in the collections and where possible to assign them to described species, where that is impossible I give the characters which I notice as belonging to each. I think when I explain the position in which this section now stands I shall not be accused of undue cowardice in hesitating to refer the more obscure species to any of the descriptions now extant. I have spent months over this group and feel sure that no satisfactory result can be obtained without having the type specimens of all the species under one's eye and providing a complete synopsis of them.

There are over 30 presumed species described, of which nearly half are known by one sex only (the ♀), in those where the ♂ is described I can find no allusion to the forms of the apical segments and armature. These give very reliable though in some cases slender characters, and without the help of these I have been unable even from the descriptions of celebrated Hymenopterists to determine my species. The sculpture of the clypeus and abdomen appears to me to be more or less variable although there seem to be definite types of sculpture which keep distinct notwithstanding the variations in each. Another difficulty arises as to the essential characters of the males. To examine these, unless they have been extracted when fresh, means to destroy more or less the specimen and to make a proper description of its external characters impossible. Mr. Morice, who collected a large number of males at Algiers, first pointed out to me several forms of armature amongst his captures and in dissecting my own taken by Mr. Eaton I find others. Of all these I propose to give diagrams as I think no description will satisfactorily point out the distinguishing characters. I had hoped that the relative proportions of joints 1, 2 and 3 of the flagellum might have afforded reliable characters, but they are so nearly the same in most of the species and appear to vary so in accordance with the position from which they are regarded that very little satisfactory evidence can be got from them.

ANDRENA MINUTULA, K. (*parvula*).

- ♂ 1. Algiers, 24, ii, 93. (*A. E. E.*)
 ♂ 8. Biskra, on *Periderca fuscata*, 4 and 8, ii, 94 and 25,
 i, 95. (*A. E. E.*)
 ♂ 2. Biskra, 14, ii, 94. (*A. E. E.*)
 ♂ 1. „ on *Brassica napus*, 27, ii, 97. (*A. E. E.*)

ANDRENA TRIZONA, Per.



- ♂ ♀ Bône, visiting *Koniga maritima*, 4, ii, 96.
 (*A. E. E.*)
 ♂ ♀ Bone, visiting *Scnccio leucanthemifolius*, 4, iii, 96.
 (*A. E. E.*)
 ♂ 5, ♀ 1. Bône, 24, ii to 6, iii, 96. (*A. E. E.*)

ANDRENA VARICORNIS, Per.

- ♂ 1. Biskra, on *Tamarix brachysylis*, 4, iv, 95. (*A. E. E.*)
 ♂ 1. „ on *Moricandia cinerea*, 16, ii, 94. (*A. E. E.*)
 ♀ 1. „ on *Moricandia arvensis*, 10, ii, 97. (*A. E. E.*)

ANDRENA SCHENKELLA, Per.



- ♀ 1. Constantine, visiting *Thapsia garganica*, 28, v, 95,
 (*A. E. E.*)
 ♂ 1, ♀ 4. Algiers. 14, iii, 98. (*F. D. M.*)

ANDRENA IMPUNCTATA, Per.

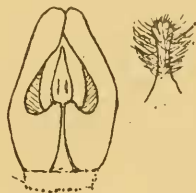
- ♀ 3. Biskra, on *Ammi visnaga*, 24, v, 93 and 5, vi, 97.
(A. E. E.)
♀ 10. „ i. iv to 25, v, 98. (F. D. M.)

ANDRENA PUSILLA, Per.

- ♂ 1. Biskra, on *Priverca fuscata*, 4, ii, 94. (A. E. E.)
♀ 2. Constantine, on *Diplotaxis muralis*, 9 and 22, v, 95.
(A. E. E.)
♀ 2. Algiers, 23, ii, 93. (A. E. E.)
♀ 1. Biskra, on *Brassica napus*, 27, ii, 97. (A. E. E.)
♀ 1. „ on *Sonchus maritimus*, 12, iv, 97.
(A. E. E.)
♀ 1. „ amongst *Tamarix*, 19, iv, 97. (A. E. E.)
♀ 15. Algiers, 14, iii to 27, iv, 98. (F. D. M.)

ANDRENA ALPHA.

This ♂ is peculiar in having the clypeus raised until just above the anterior margin, so that the rounded front edge of the elevation looks like the apex of the clypeus, it is very shining and remotely punctured. Antennæ dark testaceous beneath with the 2nd joint of the flagellum shorter than the 2 following together, 3rd shorter than the 4th, the rest rather longer than wide, slightly increasing in length towards the apex. Face vertex and cheeks clothed

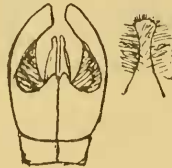


with white hairs. Thorax clothed with white hairs. Mesonotum finely rugulose without evident punctures, propodeal area not clearly limited, finely rugulose. Abdomen finely rugulose slightly shining without definite puncturation, apical impressions well defined, rather narrow, very pale, smooth and less sculptured than the rest of the segments; segments 2, 3, and 4 with white but not very conspicuous lateral bands of hairs, tarsi except the metatarsi testaceous. In size slightly larger than *minutula*.

- ♂ 1. Biskra, river-bed, on *Moricandia arvensis*, 11, ii, 94.
(*A. E. E.*)
♂ 1. „ on *Moricandia fuscata*, 10, iii, 94. (*A. E. E.*)

ANDRENA BETA.

A slightly larger species than the preceding, face including the clypeus densely clothed with pale ochreous hairs, from what is visible of the clypeus between the hairs it appears to be very largely and closely punctured. Antennæ pale testaceous beneath, 2nd joint of the flagellum unusually short, the 3rd joint very wide and transverse which makes it look like a continuation of the 2nd, as it is quite as wide or possibly wider than that joint, 4th and following

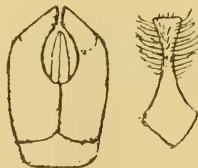


joints nearly quadrate, the apical joints rather longer. Vertex clothed with pale hairs, thorax clothed with pale hairs. Mesonotum finely rugulose and slightly shining with a large scattered puncturation, propodeal area rugulose especially near its base; abdomen rather shining, finely rugulose, impressions narrow and deep, nearly smooth and much discoloured, sides of the segments with inconspicuous bands of whitish hairs; tarsi of all the legs pale.

- ♂ 1. Biskra, on *Reseda*, 12, ii, 97. (*A. E. E.*)

ANDRENA, GAMMA.

Another species with testaceous tarsi although these are darker than in either of the preceding. In size it is distinctly smaller.



The face is clothed with pale hairs, the clypeus is finely rugulose, punctured and somewhat shining, the antennæ have the 3rd and 4th

joints of the flagellum transverse and subequal, the 2nd being almost as long as the next 2 together, mesonotum finely rugulose without evident puncturation, propodeal area indefinite, very finely rugulose, abdomen finely rugulose somewhat shining, with a remote fine puncturation, apical impressions slightly indicated, sides of the segments with a thin white fringe very distinct from the other species with pale tarsi by the form of the armature.

- ♂ 1. Bône, 2, iii, 96. (*A. E. E.*)
♂ 3. Algiers, 17, iii, 98. (*F. D. M.*)

ANDRENA, sp. ?

This may be the ♀ of either of the preceding, it is about the size of a large *minutula*, the clypeus is shining and finely and remotely punctured, finely striate or rugulose at the extreme base, thorax clothed with whitish hairs, finely rugulose, without evident punctures, propodeum very finely rugulose its area merely indicated by a narrow smoother line, the apical portion of the area slightly shining, abdomen very finely rugulose, the impressions only indicated at the sides and each segment rugulose up to its posterior margin which bears on each side a rather well-marked fringe of white hairs, that of the 4th segment forming an entire band; 5th in the centre and 6th at the sides with golden hairs; legs clothed with white hairs, scopæ white.

- ♀ 1. Biskra, visiting *Tragacanthum undatum*, 13, iii, 97.
(*A. E. E.*)

ANDRENA DELTA.

A species peculiar in the very, small size of the armature, face clothed with white hairs, clypeus largely punctured, shining, truncate in front, flagellum with the 2nd and 4th joints subequal, 3rd slightly shorter, rest rather longer than wide, mesonotum finely rug-



lose and with a very fine scattered puncturation propodeal area finely rugose at the base, abdomen finely rugulose, with a fine puncturation among the rugosities, apical impressions well marked and sides of the segments with distinct white fringes.

- ♂ 1. Algiers, 30, iv, 98. (*F. D. M.*)

ANDRENA EPSILON.

A small short species, head (including the vertex) and thorax clothed with pale hairs, clypeus rather shining with a remote irregular puncturation, antennæ brown beneath, 2nd joint of the flagellum only slightly longer than the 3rd, 3rd slightly shorter than 4th, the rest subquadrate appearing wider than long in some



positions, mesonotum finely rugulose and with a very scattered, fine puncturation, propodeal area indefinite, finely rugulose, abdomen short and elliptic, dull, rugulose, impressions strongly marked and rugulose like the rest of the segment, scarcely any indication of lateral fringes.

♂ 1. Médéa, Route d'Alger, 26, vi, 93. (*A. E. E.*)

♂ 1. „ Koudia Sma, on *Daucus carota*, 8, vii, 93.
(*A. E. E.*)

ANDRENA ZETA.

A species which closely resembles *nana* of Kirby in the puncturation of the abdomen. I thought at one time it might prove to be *abstersa*, Per., but it has not got an unusually convex abdomen neither is the appendix of the labrum unusually small as described by that author.

♂. With the hairs of the face and vertex pale, clypeus shining and largely punctured, 2nd joint of the flagellum rather longer than the 4th, 3rd slightly shorter than the 4th, the rest subquadrate, mesonotum rugulose, finely punctured, propodeal area very finely reticulate, abdomen shining, finely rugulose, with fine punctures among the rugulosities, the impressions deep, discoloured, and smoother than the rest of the segment, lateral fringes white.

♀. With the clypeus less shining than in the ♂, finely rugulose and largely punctured, mesonotum finely rugulose and finely punctured, abdomen slightly shining and rather closely but finely

punctured, the impressions wide, somewhat discoloured and smoother than the disc.

Of the same size as *minutula*.

Unfortunately I destroyed the armature of my only ♂ in dissecting it out.

♂ 1, ♀ 3. Constantine, on *Scdum coruleum*, 13 and 16, v, 95. (A. E. E.)

♀ 1. „ on *Ferula communis*, 20, v, 95. (A. E. E.)

♀ 1. Algiers, 14, iii, 98. (F. D. M.)

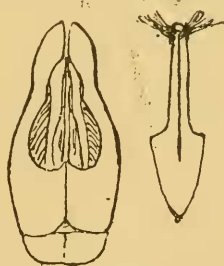
ANDRENA ETA.

Very like the above in puncturation but with long brown hairs on the face in the region of the antennæ, these latter have 2nd and 4th joints subequal, and the 3rd shorter, the mesonotum exhibits no sign of puncturation and the abdominal fringes are unusually long and bright.

♂. Bône, 2, iii, 96. (A. E. E.)

ANDRENA THETA.

A rather large ♂ with very long white hairs on the head and thorax, those of the face mixed with sooty-coloured hairs, clypeus rugulose and very strongly punctured, antennæ testaceous-brown beneath, 2nd joint of flagellum nearly as long as the 3rd and 4th together, 3rd slightly shorter than the 4th, the rest subquadrate



gradually increasing in length towards the apex. Mesonotum finely rugulose and with some scattered shallow punctures, propodeum finely rugulose its area scarcely determined, abdomen elongate, very finely rugulose with an exceedingly fine puncturation scattered among the rugulosities of the 2nd and following segments, apices of the segments slightly discoloured but scarcely impressed, the sculp-

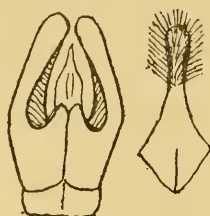
ture like that of the disc but impunctate, lateral fringes very slightly indicated. A very well-marked species on account of the very unusual shape of the 8th ventral segment with its somewhat bottle-brush arrangement of hairs at the apex, and the very elongate armature.

♂ 1. El Biar, on *Compositæ*, 20, iii, 93. (*A. E. E.*)

♂ 3. Algiers, 13, iii to 7, iv, 98. (*F. D. M.*)

ANDRENA IOTA.

Slightly smaller than the preceding, head clothed with pale hairs clypeus shining, largely punctured, antennæ with the 2nd joint of the flagellum slightly shorter than the 3rd and 4th taken together, the 3rd not quite so long as the 4th, mesonotum dull, finely rugu-



lose, propodeal area finely rugulose, abdomen finely rugulose, impunctate, more or less shining, impressions discoloured, well marked at the sides, less sculptured than the rest of the segments, lateral fringes hardly noticeable. Exceedingly like *alpha* but clypeus built on a different plan not raised on the disc as in that species.

♂ 1. Constantine, visiting *Hypochaeris glabra*, 14, v, 95.
(*A. E. E.*)

♂ 20. Algiers, 15, iii to 9, iv, 98. (*F. D. M.*)

ANDRENA KAPPA.

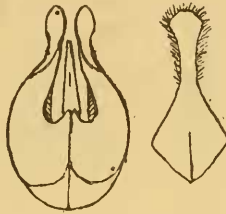
Almost identical with the preceding but differing in the slightly longer stipites of the armature and the very fine puncturation scattered amongst the rugosities of the abdomen.

♂ 1. Bône, 24, ii, 96. (*A. E. E.*)

ANDRENA LAMBDA.

Head and thorax clothed with long whitish hairs, a few of those near the insertion of the antennæ more or less blackish, clypeus

rather shining, and strongly punctured, 2nd joint of the flagellum longer than the 4th, 3rd shorter than the 4th, mesonotum finely rugulose and with a fine remote, but distinct puncturation; propodeal area well defined, finely and somewhat clathrately rugose, its surroundings finely rugulose; abdomen shining, its rugulosity



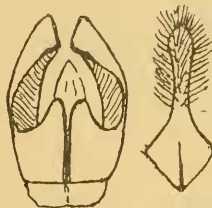
more superficial than in most of the forms, impressions well marked, sculptured much as the rest of the segment, slightly discoloured at the apex, armature very peculiar in the strongly incurved and narrow stipites; apparently a very distinct species, but in neither collection can I find any ♀ which looks likely to belong to it.

♂ 1. Bône, 1, v, 96. (*A. E. E.*)

♂ 15. Algiers, 15, iii to 9, iv, 98. (*F. D. M.*)

ANDRENA MU.

Head and thorax clothed with long whitish hairs, a few of those near the insertion of the antennæ blackish. 2nd joint of the flagellum slightly longer than the 4th, 3rd shorter, mesonotum finely rugulose with a distinct but remote puncturation, propodeal

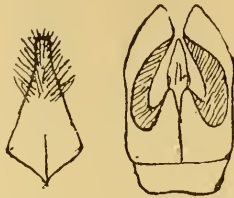


area scarcely defined, finely and reticulately rugose its surroundings almost equally rugose, abdomen dull the rugulosity very close and distinct, in some aspects looking almost like punctures, and a few well defined punctures are scattered amongst them, apical impressions of the segments not very strongly marked, rugulose like the disc.

♂ 3. Algiers, 28, iii, 98. (*F. D. M.*)

ANDRENA NU.

Head and thorax clothed with whitish hairs, those near the insertion of the antennæ mixed with darker ones, antennæ with the 2nd joint of the flagellum much longer than either the 3rd or 4th which are subequal and much wider than long. The following joints are all more or less transverse with the exception of the 11th



and 12th, mesonotum finely rugulose and with a distinct remote puncturation; propodeal area scarcely defined, very finely and not reticulately rugulose, in this respect similar to its surroundings, abdomen shining, very finely rugulose, and with a distinct very fine but not very distant puncturation, apices of the segments not discoloured, smoother than the discs, but scarcely impressed.

♂ 3. Algiers, 17, iii to 19, iv, 98. (*F. D. M.*)

This species closely resembles the former in the shape of the armature but is quite distinct in sculpture and in the very unusual, somewhat triangular, form of the 8th ventral segment.

ANDRENA, sp. ?

This ♀ may belong to the ♂ described above as it has the same finely rugulose propodeal area and a similarly sculptured abdomen; but from a single example amongst such closely allied forms, it is difficult to draw any satisfactory conclusion.

ANDRENA, sp. ? (*stylopized*).

♀ 1. Algiers, 28, iv, 98. (*F. D. M.*)

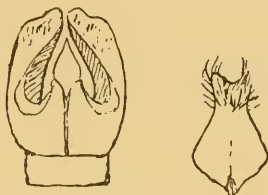
♀ 2. Algiers, 14 and 24, iii, 98. (*F. D. M.*)

Being stylopized I have not endeavoured to refer these to any of the above species as their characters are liable to have been modified by the presence of the parasites.

ANDRENA OMICRON.

A short very rugose species easily distinguishable from any of the above.

♂. Head and thorax clothed with long white hairs, clypeus rugose, face and vertex vermiculately strigose, antennæ with 3rd and 4th joints of the flagellum subequal, rather wider than long, together rather longer than the 2nd; mesonotum dull, finely rugulose and strongly and somewhat remotely punctured, propodeum rugulose, clathrately so at the extreme base, abdomen short, elliptic, rugose and closely punctured, apical impressions strongly marked, finely rugulose, seventh ventral segment produced into



two strong processes each of which terminates in a tuft of pale hairs, 8th very wide produced at the apex into two angles with a wide sinus between them, the whole segment densely clothed with pale hairs.

♀ very closely resembling the ♂ even in form, 2nd joint of the flagellum rather longer than the two following taken together, mesonotum dull and rugulose rather closely punctured, propodeal area rather vermiculately rugose, abdomen sculptured as in the ♂ anal fimbria dull golden, scopæ whitish.

♂ 3, ♀ 4. Algiers, 16-31, iii, 98. (*F. D. M.*)

ANDRENA BISKRENSIS, Per.

♂ 5, ♀ 1. Biskra, 12, ii, 97. (*A. E. E.*)

♀ 3. „ on *Diploptaxis*, 11, ii, 97. (*A. E. E.*)

♂ 1, ♀ 3. „ on *Brassica napus*, 27, ii, 97. (*A. E. E.*)

1 ♀. „ *stylopterid*, 10, ii, 97. (*A. E. E.*)

ANDRENA, sp. ?

1 ♀. Biskra, Fontaine Chaude sandhills, on *Euphorbia guyoniana*, 17, iii, 94. (*A. E. E.*)

A ♀ in not very good condition closely allied to the preceding.

ANDRENA HYPOPOLIA.

♀ 1. Biskra, on *Ammi visnaga*, 29, v, 94. (*A. E. E.*)

♀ 3. „ 10 to 23, v, 98. (*F. D. M.*)

ANDRENA PROPINQUA, Schk.

♀ 1. Algiers, iii, 98. (*F. D. M.*)

ANDRENA TINGITANA, Per.

♂ 4, ♀ 1. Constantine, visiting *Enanthe fistulosa*, 7 and 10, v, 95. (*A. E. E.*)

♀ 6. Le Tarf, on *Foeniculum vulgare* and *Ammi visnaga*, 24 and 26, vii, 96. (*A. E. E.*)

ANDRENA AFZELIELLA, Kirb.

♂ 2. Constantine, 16, vi, 98. (*F. D. M.*)

♀ 1. Algiers, 31, iii, 98. (*F. D. M.*)

ANDRENA, sp. ?

♀ 1. Biskra, visiting *Acanthyllis tragacanthoides*, 24, ii, 95. (*A. E. E.*)

Allied to the above and possibly a variety of it.

BIAREOLINA NEGLECTA, Drs.

♀ 1. Algiers, 9, iii, 93. (*A. E. E.*)

♀ 3. Bône, on *Scnccio leucanthemifolius*, 15, ii, and 11, iii, 96. (*A. E. E.*)

1 ♂, 4 ♀. Algiers, 6-11, iv, 98. (*F. D. M.*)

NOMIA LATIPES, Mor.

♂ 6, ♀ 2. Biskra, on *Ammi visnaga*, 26, v to 22, vi, 97. (*A. E. E.*)

♂ 1, ♀ 2. „ 20, v to 6, vi, 98. (*F. D. M.*)

NOMIA RUFICORNIS, L.

♂ 2. Biskra, Route des Ziban, on *Ammi visnaga*, 18, v, 93. (*A. E. E.*)

♀ 1. „ Col de Sfa, 27, v, 93. (*A. E. E.*)

♀ 2. „ rifle range beyond Beni Mora, 3 and 28, v, 94. (*A. E. E.*)

♀ 1. „ on *Moricandia arvensis*, 23, iv, 95. (*A. E. E.*)

♂ 5, ♀ 3. „ mostly on *Tamarix*, 9, iv to 15, v, 97. (*A. E. E.*)

♂ 11, ♀ 9. „ 17, v to 9, vi, 98. (*F. D. M.*)

♀ 1. Médéa, Hill north of railway station, 10, viii, 93. (*A. E. E.*)

- ♀ 1. Médéa, between Médéa and Lodi, on *Centaurea calcitrapa*, 14, vii, 93. (A. E. E.)
♀ 2. „ on *Daucus sctifolius*, 30, vii and 2, viii, 93. (A. E. E.)
♂ 5, ♀ 1. Hippône, on *Ammi visnaga*, 10 and 12, viii, 96. (A. E. E.)
♂ 1. Le Tarf, on *Centaurea napifolia*, 17, vi, 96. (A. E. E.)
♀ 2. Bône, one on *Cynanchum acutum*, 30, vii and 23, viii, 97. (A. E. E.)

DASYPODA DISCINCTA, Rossi.

- ♂ 2, ♀ 1. Médéa, N. and N.E. of the town, alt. about 3,000 ft. on *Scolymus hispanicus*, 29, vi and 1, vii, 93. (A. E. E.)
♂ 1. „ N. slope of Koudia Sma, on *Scolymus hispanicus*, 8, vii, 93. (A. E. E.)
♀ 1. „ Ravines near Md. Ben Omar, alt. 2,730-3,130, on *Scolymus hispanicus*, 11, vii, 93. (A. E. E.)

DASYPODA PLUMIPES, Pz. 3.

- ♂ 1. Biskra, near the grounds of Château Landon, 24, v, 93. (A. E. E.)
♀ 1. Bône, hillside in the plaine des Karézas, 6, xi, 93. (A. E. E.)

CILISSA MAURA, Per.

- ♀ 1. Biskra, right hand of the railway before the French Cemetery, visiting *Moricandia arvensis*, 25, iii, 95. (A. E. E.)

NOMIOIDES PULCHELLUS, Schenck.

- ♂ 1. Médéa, on *Dianthus*, 27, vi, 93. (A. E. E.)
♂ 1. Biskra, 9, vi, 98. (F. D. M.)

NOMIOIDES VARIEGATUS, Oliv.

- ♂. Biskra, numerous examples visiting *Tamarix*, *Ammi visnaga*, and a tree with blue flowers in the Jardin by Fort St. Germain, 28, iii and 26, v, 93. (A. E. E.)
♂ 5, ♀ 3. Biskra, 13 to 28, v, 98. (F. D. M.)
♀ 1. Le Tarf, on *Foeniculum vulgare*, 26, vii, 96. (A. E. E.)

- ♂ 5, ♀ 4. Bône, on *Tamarix*, 29, vii to 20, viii, 97.
 (A. E. E.)
 ♀. „ 17, iii, 96. (A. E. E.)
 ♀ 3. „ i, v, 96. (A. E. E.)
 ♀ 1. „ on *Salsola kali*, 20, viii, 97. (A. E. E.)

NOMIOIDES SQUAMIGER, n. sp.

Caput et thorax viridia pallido pilosa etiamque pubescentia albida (quæ tamen facillime deteri potest) vestita. Caput rotundatum scutellum et postscutellum flava, abdomen maris nigrum segmentorum apicibus flavis, feminae flavum segmentis primo et secundo et nonnunquam sequentibus fascia nigra discali ornatis.

This species is very closely allied to *fallax*, Hdl., and may prove to be only a variety of it. It however differs in the following characters which appear to me to be more than varietal.

In both sexes the head and thorax are clothed with deciduous white scale-like pubescence, as well as with short erect pale hairs, this deciduous pubescence is more marked in the ♀ and the longer hairs more so in the ♂. The green colour of the surface is of a less bluish tint and in the ♂ the surface is duller. The abdomen in the ♂ has the apices of the 1st 2nd and 3rd segments broadly, of the 4th and 5th narrowly, and the entire 6th and 7th testaceous; in the ♀ the whole abdomen is very pale testaceous, the 1st 2nd and 3rd segments bearing a narrow slightly curved black line across the disc but not reaching either lateral margin, in some specimens the line on the 3rd segment is interrupted in the centre; the width of these lines varies considerably, and also their length, in some the line on the 3rd segment is absent, and in some there is a line on the 4th, and rarely one on the 5th.

Long $3\frac{1}{2}$ –4 mm.

- ♂ 1, ♀ 3. Biskra, on *Ammi visnaga*, 18 to 24, v, 93.
 (A. E. E.)
 ♂ 6, ♀ 4. „ on a tree with blue flowers in the
 Jardin by Fort St. Germain, 26, v,
 93. (A. E. E.)
 ♀ 2. „ on *Tamarix brachystylis*, 4, iv, 95 and
 iv, 97. (A. E. E.)
 ♀ 2. „ on *Zizyphus lotus*, 14 and 15, v, 97.
 (A. E. E.)
 ♂ 2, ♀ 2. „ 28, v and 9, vi, 98. (F. D. M.)
 ♂ 1, ♀ 1. Col de Sfa, on inconspicuous wiry *Umbelliferæ*,
 27, v, 93. (A. E. E.)

- ♂. Between Tizi Ouzou and Azazga, on *Zizyphus lotus*,
12, vi, 93. (A. E. E.)
♂ 2. Médéa, on *Eryngium triquetrum* and *Mentha rotun-*
difolia, 10 and 19, vii, 93. (A. E. E.)

NOMIOIDES DECEPTOR, n. sp.

Præcedenti colore et pubescentia simillima, sed ab ea differt facie utroque sexu longiore, a *pulchello*, *variegatoque* thoracis pilis squamiformibus facile distinguenda.

Another species of very similar coloration and vestiture to the last ; in the two males however which I possess one has a short black band on the basal segment of the abdomen only and the other has one on the 2nd segment also, in both the apical segments are more or less piceous, in the two females both show a short black band on the basal segment only, both sexes may be known from either *fallax* or *squamiger* by the longer face. This is distinctly longer than wide in the ♂, and oval not round in the ♀, the face of the ♀ much resembling that of *pulchellus* although a trifle wider, the ♂ has the face much less constricted than in *pulchellus* and the farinose scale-like pubescence distinguishes both the sexes from that species as well as from *variegatus* or *fallax*.

Long. $3\frac{1}{2}$ -4 mm.

- ♂ 2, ♀ 2. Biskra, on *Ammi visnaga*, 18 and 24, v, 93.
(A. E. E.)
♀ 1. „ on *Decurva chlorantha*, 13, v, 97.
(A. E. E.)

NOMIOIDES EXCELLENS, n. sp.

Præcedentibus multo major scutello viridi æneo, flavo bimaculato, abdomine utroque sexu flavo segmentorum apicibus nigro fasciatis.

A species of almost twice the bulk of any of the preceding. It has a round wide head in both sexes as in the ♀ of *deceptor* and is clothed with white deciduous pubescence as in that species and *squamiger* but differs from both of them in its much larger size, and in the colour of the scutellum ; this only bears two testaceous spots as in the ♀ of *variegatus*, and the mesonotum of the ♀, just in front of the scutellum, is testaceous. This also is a character of *variegatus* but the broader face will distinguish it at once from that species in the ♀ and the pale abdomen with regular dark fasciæ in the ♂. These fasciæ in both sexes are wide and cover the apices of the segments, whereas in both *squamiger* and *deceptor* the fasciæ in the

♀ run across the disc and in the ♂ of these species it is the apical portion of the segments which is pale.

Long. $5\frac{1}{2}$ – $5\frac{3}{4}$ mm.

- 1 ♂. Biskra, on a tree with blue flowers in the Jardin by Fort St. Germain, 26, v, 93. (A. E. E.)
 ♀ 2. „ on *Ammi visnaga*, 18, v, 93 and 17, v, 97. (A. E. E.)
 ♀ 1. „ on *Tamarix*, 29, iv, 97. (A. E. E.)

PANURGUS PLATYMERUS, Per.

- ♂ 3, ♀ 1. Le Tarf, abundant on *Scolymus grandiflorus*; many spend the night among the florets curled up on their sides, 17, vi, 96. (A. E. E.)
 ♂ 3. Philippeville, 20, vi, 98. (F. D. M.)

PANURGUS SICULUS, Mor.

- ♂ 2. Pointe Pescade, near Algiers, asleep in flowers of *Asteriscus maritimus*, lying over a little in the angle contained by the florets of the ray and disc, 27, iv, 93. (A. E. E.)
 ♂ 2. Constantine, on *Scolymus hispanicus*, 14, iv, 94. (A. E. E.)
 ♂ 2. „ on *Sonchus tenerrimus*, 8 and 14, v, 95. (A. E. E.)
 ♀ 1. „ on *Crepis taraxacifolia*, 23, v, 95. (A. E. E.)
 ♂ 3. Bône, on *Crepis taraxacifolia*, 20, iv and 4, v, 96. (A. E. E.)
 ♂ ♀. Sidi Ferruch, 8, v, 93. (A. E. E.)
 ♂. Tizi Ouzou, on *Compositæ*, 15, vi, 93. (A. E. E.)
 ♂ 18, ♀ 2. Alger, 28, iii, 98. (F. D. M.)
 ♂ 1, ♀ 2. Philippeville, 20, vi, 98. (F. D. M.)

PANURGUS VACHALI, Per.

- ♂ 2, ♀ 2. Biskra, Garden of Château Landon, on *Leontodon (Kalbfusia) mulleri*, Schultz.—Bip., 15, iv, 94. (A. E. E.)
 ♂ 8, ♀ 7. „ on *Picridium vulgare* and other yellow composites, 7 to 13, iv, 97. (A. E. E.)
 ♂ 1, ♀ 4. „ 6 to 9, v, 98. (F. D. M.)

PANURGUS CALCEATUS, Per. = *algericus*, Friese.

- ♂ 1. Pointe Pescade, near Algiers, on *Asteriscus maritimus*, 10, v, 93. (A. E. E.)
♀ 1. Bône, on *Crepis taraxifolia*, 20, iv, 96. (A. E. E.)
♂ ♀. Aine Draham, 21, vii, 96. (A. E. E.)
♂ ♀. Le Tarf, 24, vi, 96. (A. E. E.)

CAMPTOPŒUM HANDLIRSCHI, Friese.

- ♂ 1, ♀ 2. Biskra, 20, v, 94. (A. E. E.)
♂ 4, ♀ 3. „ near Jardin Landon, on *Frankenia*, 15, v, 97. (A. E. E.)
♂ 7, ♀ 4. „ 5 to 23, v, 98. (F. D. M.)

ROPHITES ALGIRUS, Per.

- ♂ 3. Algiers, 29 and 30, iv, 98. (F. D. M.)

PANURGINUS VARIEGATUS, Mor.

- ♀ 1. Biskra, corn-fields along the Route des Ziban, on *Ammi visnaga*, Lam., 18, v, 93. (A. E. E.)
♀ 1. Hippône, on *Ammi visnaga*, 15, iii, 96. (A. E. E.)
♂ 1, ♀ 11. Biskra, 14 to 16, v, 98. (F. D. M.)

PANURGINUS ALBOPILOSUS, Luc.

- ♂ 1, ♀ 2. Biskra, on *Diplotaxis pendula*, 14, iv, 94 and 26, ii to 13, iii, 97. (A. E. E.)
♂ 3, ♀ 3. Constantine, on *Diplotaxis muralis*, 21, v and 1, vi, 95. (A. E. E.)
♂ 6. El Guerrah, 3, v, 98. (F. D. M.)

DUFOUREA EATONI, n. sp.

Nigra, punctata, segmentorum abdominalium apicibus valde impressis pallide piceis et impunctatis. Maris antennarum articulis 2 and 3 brevissimis simul sumptis quarto sub-æqualibus, feminæ articulis flagelli transversis, subtus pallide testaceis—area propodealis impressa linea nitida circumdata.

♂. Black, shining, the deeply impressed apices of the abdominal segments pale piceous, head clothed with very pale ochreous hairs, those of the face white, vertex shining, remotely and rather unevenly punctured, antennæ with 2nd and 3rd joints very short and transverse, the two taken together about as long as the 4th the rest longer than wide each more or less curved,

especially the 8th 9th and 10th, thorax clothed with very pale ochreous hairs above, with white hairs beneath; mesonotum including the scutellum shining, remotely punctured, wings hyaline, nervures piceous, 2nd recurrent received in the 2nd submarginal cell, propodeal area depressed dull and finely rugose, bounded posteriorly by a shining curved somewhat raised line, abdomen strongly and remotely punctured and clothed with scattered pale hairs, the segments much raised across the disc, apical impressions very deep, pale and impunctate and crossed by a fringe of fine hairs which grow on the apex of the raised portion of the segments, legs with pale calcaria and clothed with white hairs.

♀ differs from the ♂ in the ordinary sexual characters, also in being more finely punctured. The antennæ are testaceous beneath and at the apex, and the joints of the flagellum are very short and transverse, vertex of the head and mesonotum rather closely but irregularly punctured, in this respect very different from *vulgaris*, propodeum like that of the ♂, puncturation of the abdomen less strong than in the ♂ but well marked, that of the basal segment stronger and more remote than of the others, impressions very wide and pale piceous, legs more or less piceous varying very much in depth of colour.

Long. ♂ 7, ♀ 6 mm.

2 ♂, 13 ♀. Biskra, on *Picridium vulgare*, 5 to 13, iv, 97.
 (A., E. E.)
 ♀. „ 12, v, 98. (F. D. M.)

DUFOUREA SIMILIS, Friese.?

♀ 1. Biskra, 6, v, 98. (F. D. M.)

This specimen, which bears a label in Herr Friese's handwriting *similis* (?) is very like the above, but differs in the shallower abdominal impressions and the more polished mesonotum which is scarcely punctured.

ROPHITES ALGIRUS, Per.

♂ 3. Algiers, 29 and 30, iv, 98. (F. D. M.)

NOMADA NOBILIS, H. S.

♀ 1. Algiers, 25, iv, 98. (F. D. M.)

NOMADA SEXFASCIATA, Pz.

♀. Algiers, 1 to 5, iv, 98. (F. D. M.)

NOMADA SUCCINCTA, Pz.

- ♂ 1. Biskra, 3, v, 94. (*A. E. E.*)
♀ 3. „ hovering over the ground, 10 to 27, ii, 97.
(*A. E. E.*)
♀ 1. Bône, 6, iv, 96. (*A. E. E.*)
♀ 1. Hippône, 8, iv, 96. (*A. E. E.*)

In both these females from Bône and Hippône the clypeus is entirely black.

NOMADA FULVICORNIS, Lep.

- ♂ 1. Bône, 28, iv, 96. (*A. E. E.*)
♂ 1. Algiers, 25, iv, 98. (*F. D. M.*)

NOMADA, sp. ?

- ♂ 3. Biskra, ii and iii, 95 and 97. (*A. E. E.*)
Too discoloured to describe satisfactorily.

NOMADA CIRTANA, Per.

- ♂ 1, ♀ 2. Biskra, left of the Route de Tougourt, a little beyond Jardin Landon, among *Periderca fuscata*, Webb, 21, ii, 95.
(*A. E. E.*)
♂ 2, ♀ 2. Bône, near the sea-shore among miscellaneous herbage, *Senecio leucanthemifolius*, etc., 15, ii, 96. (*A. E. E.*)
♂ 2. Hippône, beside the railway to Aine Mokhra, 10, iii, 96. (*A. E. E.*)
♀ 1. „ 8, iv, 96. (*A. E. E.*)

NOMADA TRIPUNCTATA, Mor.

- ♀ 1. Algiers, 9, iv, 98. (*F. D. M.*)

NOMADA TRIPUNCTATA, Mor., var. ?

- ♂ 1. Bône, 5, vi, 96. (*A. E. E.*)

This is probably a distinct species but from a single ♂ I do not like to treat it as such. The tubercles and tegulae and scutellar spots are ferruginous not flavous and the hairs of the ventral segments are much shorter, the wings are more clouded and the 3rd submarginal cell wider. At the same time the general form of the insect is so similar to that of *tripunctata* that I think it safer not to describe it as new

NOMADA ANDALUSICA, Schm.

♀ 1. Bône, 8, iv, 03. (*A. E. E.*)

NOMADA AGRESTIS, Fab.

♀ 1. Near Algiers, 6, iv, 93. (*A. E. E.*)

♂ 3, ♀ 3. Hippône, beside the railway to Aine Mokhra,
8 to 10, iii, 96. (*A. E. E.*)

♂ 1, ♀ 3. Algiers, 18 to 27, iii, 98. (*F. D. M.*)

NOMADA PECTORALIS, Mor.

♀ 1. Between Médéa and Lodi, on *Centaurea calcitrapa*,
12, vii, 93. (*A. E. E.*)

NOMADA SCUTELLATA, n. sp.

Læte ferruginea capite thoraceque nigro ornatis hoc longitudinaliter trivittato; capite subrostrato antennarum articulo tertio flagelli, secundo sesquilongiore abdomen ferrugineum, valvula anali apice leviter exciso tibiis posticis apice sexspinosis. Alis valde valde infumatis.

♂ Head rufo-testaceous the vertex posteriorly extending in an angular form to the anterior ocellus and the region of the insertion of the antennæ black; antennæ dark on the 4th and following joints; thorax rufo-testaceous, mesonotum with a wide central stripe and a narrow one on each side, metanotum except the post-scutellum, propodeum, the whole of the thorax beneath except a large spot on the mesopleuræ with a small spot above it, black. Wings of a dark smoky colour, hind coxæ above, and a stain on the underside of the hind femora, black.

Head slightly rostrate, closely and rugosely punctured, sparingly clothed with short reddish hairs, cheeks between the eyes and mandibles developed, labrum nearly twice as wide as long, its sides rounded and its apex truncate, there is a very fine raised line visible down its centre, this is elevated at the apex into a very small compressed tubercle. Antennæ with the 2nd 4th and following joints of the flagellum viewed from beneath subequal, each about three-quarters the length of the 3rd and slightly longer than wide. Mesonotum very closely and deeply punctured, nearly glabrous, the punctures often confluent, scutellum raised into two rather angular, divergent tubercles, very strongly punctured, propodeum dull, clothed with short black hairs, its area rugose at the base, its sides beyond the area finely rugulose and punctured, hind tibiæ with 6 ferruginous spines. Abdomen rather dull, very finely and closely

punctured the basal segment more shining and less closely so, with 4 small darker spots in a line across it near the base, all the segments have the extreme apex shining, impunctate and slightly darkened, 7th segment slightly notched at the apex, beneath finely punctured, the apices of the segments widely impunctate and shining.

Long. 14 mm.

♂ 1. Biskra, corn-lands along the Route des Ziban, on *Ammi visnaga*, 25, v, 93. (A. E. E.)

NOMADA PLANISCUTA, n. sp.

Rufo-testacea, capite thoraceque nigris, rufo ornatis, scutello planiusculo, mesopleuris nitidis, valde punctatis, alarum, cellula cubitali tertia angusta, superne constricta, tibiis posticis, spinis duabus curvatis valde approximatis, more *succinctæ*, munitis.

♀. Rufo-testaceous, a triangular spot on the vertex of the head its apex reaching to the insertion of the antennæ, the thorax and propodeum, with the exception of a spot on each side of the pronotum, the tubercles, tegulæ, scutellum, and post-scutellum as well as a spot on each of the mesopleuræ bordering the prothorax, black. The coxæ of the front and hind pairs of legs are also almost entirely black; wings smoky-brown, apices of the 2nd and 3rd abdominal segments more or less infuscate. Head short, strongly punctured, cheeks not developed, labrum sparingly clothed with pale hairs, punctured, bearing a very small laterally compressed tubercle near its apex, antennæ with the 2nd and 3rd joints subequal, 4th slightly shorter, the rest nearly quadrate, vertex and cheeks behind the eyes clothed with short black hairs, mesonotum closely and strongly punctured, with signs of having had a clothing of short black hairs (both my specimens judging from the condition of the wings are possibly more or less rubbed), scutellum not raised, shining, rather more largely and less closely punctured than the rest of the mesonotum, its centre impressed posteriorly, mesopleuræ shining very largely and distinctly punctured, wings with the 3rd submarginal narrow, much contracted above (in one specimen this cell in the right hand wing is divided in two by a transverse nervure situated towards its apex), propodeum punctured at the sides, its area very finely rugulose, its extreme base slightly rougher, hind tibiæ with two curved short spines, close together, as in *succincta*, *mephisto*, *fucata*, *manni*, etc.; abdomen closely punctured, with only the extreme posterior edges of the segments shining, apex of the 5th segment clothed with whitish hairs.

Long. 11 mm.

- ♀ 1. Médéa, hill north of railway-station, on *Eryngium triquetrum*, 29, vi, 93. (A. E. E.)
 ♀ 1. „ North of the town; alt. about 3,000 ft., 1, vii, 93. (A. E. E.)

NOMADA BREVIS, n. sp.

Brevis, abdomine subgloboso thoraci longitudine æquali. Capite thoraceque nigris, rufo hirsutis, labro, antennis, tegulis, tuberculis, scutelloque rufis, abdomine ferrugine, tibiis posticis apice pallide et obtuse 3-spinosis.

♀. A short compact species whose abdomen is about as long as the thorax and quite of a short oval form; head and thorax black, mandibles except their apices, labrum, antennæ, tubercles, tegulæ, and scutellum ferruginous, abdomen entirely and legs ferrugineous except the coxæ and trochanters of the 2nd and 3rd pair which are black. Labrum very closely and rugosely punctured, transversely concave towards the apex, no visible tooth or tubercle, face clothed with brownish-red hairs, antennæ with all the joints of the flagellum subequal with the exception of the diminutive 1st. Vertex and thorax dull, very closely and rugosely punctured and clothed with brownish-red hairs, scutellum scarcely raised, a little less dull than the rest of the mesonotum, wings smoky, nervures dark brown, propodeum dull, clothed like the thorax, largely and closely punctured, its area very finely rugulose. Abdomen shining, basal segment impunctate, the others finely and rather closely punctured on the basal half, their apices widely impunctate; 5th clothed at the apex with whitish hairs, posterior tibiæ armed exteriorly at the apex with 3 short pale obtuse spines.

Long. 6 mm.

- ♀ 1. Biskra, in the garden of Château Landon, 15, iv, 94. (A. E. E.)

NOMADA, sp.

This ♀ is allied to *rhenana*, it has the labrum red with a small central tubercle, the 2nd and 3rd joints of the flagellum subequal and the apex of the hind tibiæ with 5 rather unequal sharp pale spines. As I have only seen this single female which has no very pronounced characteristics I refrain from describing it.

- ♀ 1. Biskra, 27, ii, 97. (A. E. E.)

NOMADA PRÆSTANS, n. sp.

Capite thoraceque nigris ochraceo pilosis, abdomine læte testaceo, antennis longis, flagelli articulo secundo tertio sesquolongiore,

reliquis latitudine longioribus, tibiis posticis feminae, apice tri-vel quatuorspinosis, spinis pallidis.

♂ ♀. Head and thorax black, the mouth parts including the apex of the clypeus and the sides of the face along the orbits of the eyes and the antennae testaceous. The scape of the antennae above is black in the ♂ and has a black stain near the apex in the ♀, and in one ♂ the first 5 joints of the flagellum are black above. The tubercles and tegulae are ferrugineous in both sexes and there is sometimes a small spot of that colour on the scutellum of the ♂, wings slightly infuscate, nervures testaceous, the abdomen with the exception of the extreme base and a small black spot at the base of the 2nd segment laterally is entirely clear testaceous, legs testaceous, the coxae in both sexes and the intermediate and hind femora beneath in the ♂ black. ♂. Head and thorax dull very closely punctured and rather densely clothed with ochraceous hairs, labrum simple, clothed with long hairs, its anterior margin slightly angulated in the centre, mandibles acute, antennae with the 2nd joint of the flagellum once and a half as long as the 3rd which is nearly twice as long as wide, the rest are distinctly longer than wide; propodeum densely punctured and hairy at the sides, its area finely clathrate. Abdomen finely and closely punctured, with a fine but inconspicuous ochreous pubescence, apical dorsal valve narrowly notched at the apex; posterior tibiae with 3 or 4 pale apical spines intermixed with pale hairs. ♀. Very like the ♂ but head and thorax much less hairy, labrum simple, nearly glabrous, antennae with the 2nd and 3rd joints of the flagellum subequal, the rest slightly longer than wide, abdomen more shining and less closely punctured, apices of the segments widely smooth and shining, impunctate, apical fimbria of 5th segment whitish; apex of the posterior tibiae with two very short pale spines.

Long. 8-9 mm.

Apparently a very distinct species of which I can find no description, its long antennae and the clear pale testaceous colour of the abdomen and legs give it a rather unusual appearance.

- ♀ 1. Bône, Route de l'Edough at the beginning of the ascent, 7, iii, 96. (*A. E. E.*)
♂ 1. „ by the railway near Hippône, 16, ii, 96. (*A. E. E.*)
♂ 1. „ by the Bône-Guelma railway, opposite Ferme Lacombe, 23, iv, 96. (*A. E. E.*)

NOMADA MULTISPINOSA, n. sp.

Polyacanthæ Per. affinis, sed mesonoto crebre punctato, et tibiis

posticis spinulis nigris magis quam in illa specie armatis facile distinguenda.

♀. Apparently closely allied to *polyacantha* Per. but differing from it in the closely punctured mesonotum and the greater number of spines on the apical portion of the tibiæ. Head and thorax black, face below the antennæ including the labrum and mandibles except at the apex, the orbits of the eyes, the antennæ, with the exception of the intermediate joints which are fuscous, the pronotum, tegulæ, tubercles, scutellum, post-scutellum and almost the entire mesopleuræ rufotestaceous; legs and abdomen entirely of that colour, wings brown with a very conspicuous clear spot beyond the 3rd submarginal cell. Face clothed with short scattered pale hairs, labrum with a small tubercle near the middle, clypeus shining, finely and rather remotely punctured, face below the antennæ rather remotely, above them closely punctured; antennæ with the 2nd and 3rd joints of the flagellum subequal, the 3rd and following joints subquadrate; mesonotum shining, closely and deeply punctured, the intervals between the punctures much narrower than the punctures themselves, scutellum slightly raised into two obtuse tubercles largely and less closely punctured than the thorax, propodeum finely rugulose, its area more or less clathrate at the base, each side with a patch of silvery white hairs; posterior tibiæ, with their external apex densely clothed with black spines numbering probably 20 or more but so closely packed that I find it impossible to count them; abdomen very shining, short oval, 1st segment impunctate or nearly so, the rest finely and regularly punctured on the basal half, impunctate on the apical, 5th fringed with whitish hairs at the apex, 2nd and following segments more or less clothed with silvery hairs at the sides.

Long. 8 mm.

♀ 1. Le Tarf, near the village, 17, vi, 96. (*A. E. E.*)

♀ 2. La Calle, 4 and 9, vii, 96. (*A. E. E.*)

NOMADA PANURGINOIDES, n. sp.

N. panurginæ, Mor., simillima, mesonoto crasse punctato antenarum flagelli articulo secundo maris tertio subæquali, femine paulo brevior, facile distinguenda.

♂ ♀. Exceedingly like *panurgina*, Mor., head and thorax black, mouth parts, labrum, clypeus in the ♀, antennæ, pronotum, tegulæ scutellum and post-scutellum, mesopleuræ and sterna ferruginous-red, in the ♀, 2 spots on the scutellum and 1 on the post-scutellum and a small spot on the mesopleuræ only in the ♂; abdomen ferruginous-red, its base and a lateral spot at the base

of the 2nd and 3rd segments a band at the apex of the 3rd and at the base of the 4th black. Legs ferruginous, the hind femora and the tibiæ on the side towards the body black in both sexes. Head and thorax shining, face clothed rather densely in the ♂, and very sparingly in the ♀ with silvery hairs. Labrum trituberculate, the tubercles arranged in a triangle. Antennæ with the 2nd joint of the flagellum subequal to the 3rd in the ♂, rather longer than the 3rd in the ♀, mesonotum largely and rather closely punctured, the punctures sometimes less than their own diameter apart at others nearly twice their diameter, wings smoky-brown, with a paler region near the apex, propodeum with a patch of silvery hairs on each side. Abdomen finely punctured on the 2nd segment, exceedingly finely and more closely so on the following, apex of the dorsal valve in the ♂ notched.

Long $6\frac{1}{2}$ -7 mm.

Easily distinguished from *panurgina*, Mor., of which I possess a specimen from Professor Perez and from *jullianii*, Schm., by the much coarser puncturation of the mesonotum, the punctures being quite twice as large, and also by the greater proportional length of the 3rd joint of the flagellum.

♂ ♀. Biskra and Constantine, numerous specimens, iv and v, 95 and 97. (*A. E. E.*)

♀. Constantine and Algiers, many, vi, 98. (*F. D. M.*)

NOMADA CARNIFEX, Mocs.

♀ 1. Bône, 16, iii, 96. (*A. E. E.*)

♀ 1. Algiers, 18, iii and 7, iv, 98. (*F. D. M.*)

I have followed Gribodo in referring these specimens to Mocsary's species, the three prominent teeth on the labrum afford a very characteristic feature.

NOMADA, sp. ?

♀ 1. Bône, near the Orphelinat, 2, iii, 96. (*A. E. E.*)

Like a diminutive *carnifex* but without the peculiar armature of the labrum, and the posterior tibiæ with 5 pale spines of which the last is longest.

NOMADA FERRUGINATA, L ?

♀ 1. Algiers, 19, iv, 98. (*F. D. M.*)

NOMADA CONNECTENS, Per.

♀ 3. Constantine, 18 to 20, vi, 98. (*F. D. M.*)

NOMADA DISCREPANS, Schm.

- ♂ ♀. Numerous. Bône, iii, iv; Hippône, iii; Constantine, v, vi; Algiers, iii, iv; Biskra, ii, iii. (A. E. E.)
 ♂. Occurring at Biskra, on *Peridera fuscata*; at Constantine, on *Hypochæris glabra*. (A. E. E.)

NOMADA FLAVOGUTTATA, K.

- ♂ ♀. Algiers, 16, iii and 7, iv, 98. (F. D. M.)

NOMADA DISTINGUENDA, Mor.

- ♂ 1. Aine Draham, 21, vii, 96. (A. E. E.)
 ♀ 1. Bône, 22, iii, 96. (A. E. E.)

NOMADA HIPPONENSIS, n. sp.

N. distinguenda, etc., affinis. Mas, antennarum flagelli articulis 3^{to}, 4^{to}, 5^{to}, 6^o subtus tuberculatis, femina articulo secundo sequentibus æquali, latitudine longioribus.

♂ ♀. A small species, of the same size and general aspect of *distinguenda*, etc. Brown, mouth parts including the labrum, clypeus and the lower part of the sides of the face, the antennæ, the pronotum above, more or less, the tubercles, tegulæ, two spots on the scutellum, united in the ♀, the post-scutellum, the abdomen except at the extreme base and legs, entirely in the ♀, partially only in the ♂, rufo-testaceous.

♂. Face clothed with ochreous hairs, antennæ with the 2nd and 3rd joints of the flagellum subequal, its basal joints to the 6th more or less infuscate posteriorly, joints 3, 4, 5 of the flagellum distinctly and 6 indistinctly tuberculate beneath, all the joints of the flagellum, except the small basal one, as long as wide, those nearer the base slightly longer. Mesonotum closely and strongly punctured sparingly clothed with ochreous hairs, scutellar tubercles slightly raised, propodeum finely rugose, bearing a patch of silvery hairs on each side, legs with the apices of the joints of all the legs and the front legs almost entirely, rufo-testaceous, posterior tibiæ in the ♀ with 2 short and 1 very long pale spine at the apex. Abdomen shining, vaguely and very finely punctured on the basal halves of the segments, in the ♂ the abdomen is brown with paler bands or spots, on the 2nd and 3rd segments, these are more or less indicated according to the darkness of the specimen.

Long. 5-5½ mm.

The peculiar antennæ of the ♂ recall that sex of *cyphognatha*, Perez, but the tubercles are fewer and

diminish in size on the more apical joints, whereas in *cyphognatha*, Professor Perez says, "la dernière la plus forte." The labrum also is simple.

♂ 3, ♀ 1. Hippône, on *Ammi visnaya*, 15, viii, 96. (*A. E. E.*)

NOMADA FURVA, K.

♂ 1. Médéa, 26, vi, 93. (*A. E. E.*)

♂ 2. Algiers, 4 and 7, iv, 98. (*F. D. M.*)

♀ 1. Biskra, 13, v, 98. (*F. D. M.*)

NOMADA, sp.

♂ 1. Bône, 20, iv, 96. (*A. E. E.*)

A species generally resembling the species of the *distinguenda* group but the antennæ have the joints of the flagellum wider than long and the 2nd and 3rd joints subequal and of the same length as the remainder, the labrum is pale without noticeable tubercles.

NOMADA, sp.

♀ 1. Bône, Valley of the Oued Deb, 11, v, 96. (*A. E. E.*)

This ♀ has the 2nd and 3rd joints of the antennæ subequal and the hind tibiæ armed at the apex with 5 or 6 exceedingly short brown spines; its position is to me doubtful and as it is a single ♀ I think it better to leave it undescribed.

PASITES MACULATUS, Jur.

♂ 1. Hippône, 15, viii, 96. (*A. E. E.*)

♂ 1, ♀ 3. Biskra, 24, iv to 7, vi, 97. (*A. E. E.*)

♂ 4, ♀ 7. Biskra, 10, v to 9, vi, 98. (*F. D. M.*)

The females are all of the variety with the thorax almost entirely red.

AMMOBATES ORANIENSIS, Lep.; = *melectoides*, Smith.

♀ 2. Algiers, 4 and 5, v, 93. (*A. E. E.*)

♂ 1. Bône, beyond the Orphelinat, parasitic on *Odynerus consobrinus*, Duf., 22, iii, 96. (*A. E. E.*)

♀ 1. Bône, 23, v, 96. (*A. E. E.*)

♂ 6, ♀ 1. Constantine, 18, iii to 14, vi, 1898. (*F. D. M.*)

AMMOBATES CARINATUS, Mor.

♀ 1. Médéa, N. of the town, alt. about 3,000 feet, on *Scabiosa maritima*, 1, vii, 93. (*A. E. E.*)

- ♂ 3. Algiers, on the ramparts, parasitic on *Eucera nigrifaciens*, frequenting its burrows in the soil, 4, iv, 93. (*A. E. E.*)
 ♂ 2. Sidi Ferruch, 8, v, 93. (*A. E. E.*)

AMMOBATES HANDLIRSCHII, Fries.

- ♀ 1. Biskra, on *Amberboa lippii*, 8, iv, 97. (*A. E. E.*)

AMMOBATES RUFIPES, n. sp.

Caput thoraxque nigra, abdomine pedibus que maxime parte rufis. Antennarum flagelli articulo secundo tertio longiore, mas vertice pone ocellos triangulariter opaco et crebre punctato femina segmento sexto abdominis impressione ovali transversa nitida, et postice punctata instructo.

♂ ♀. Black, labrum, base of the mandibles, antennæ towards the base and tubercles of prothorax in the ♀, abdomen and legs except the trochanters and coxæ in both sexes ferruginous; femora in the ♂ black except towards the apices of the hind pair. Head and thorax closely and rugosely punctured, face slightly shining, clothed with pale hairs round the insertion of the antennæ, vertex in the ♂ closely punctured and dull. This dull area extends angularly to the anterior ocellus and covers the space between the ocelli, at the sides of this triangle the surface of the head is shining and very largely punctured, in the ♀ this character is scarcely observable, in both sexes there is a slight carina on the centre of the vertex extending in the direction of the central ocellus, antennæ with the 2nd joint of the flagellum rather longer than the 3rd, the rest wider than long in the ♂, subquadrate in the ♀, pronotum clothed with a tight-fitting ochreous pubescence, wings smoky-brown. Scutellum slightly raised and shallowly channelled, post-scutellum scarcely raised, propodeum clothed with silvery pubescence at the base and sides, excavated and shining posteriorly, its area slightly raised, with a fine central channel. Abdomen very finely and closely punctured, 7th segment in the ♂ strongly so, 6th segment in the ♀ posteriorly slightly emarginate, bearing a transversely oval shining impression towards the apex, the apical half of which is largely punctured, legs and especially the coxæ, more or less clothed with silvery pubescence.

Long. 11 mm.

- ♂ 2, ♀ 6. Le Tarf, visiting heads of *Cynara cardunculus*, 23 to 25, vii, 96. (*A. E. E.*)
 ♀ 1. Biskra, on *Ammi visnaga*, 26, v, 97. (*A. E. E.*)

Apparently allied to *robustus*, Friese, but that species may be easily distinguished by the form of the sixth segment of the abdomen which he describes as bearing a trapeziform dull space, he also speaks of the legs being black and the abdominal segments more or less banded at their apices with silvery hairs.

AMMOBATES BIASTOIDES, Friese.

- ♂ 1. Biskra, 23, v, 98. (*F. D. M.*)
♂ 2. Biskra, cornfields along the Route des Ziban, on
Amni visnaga, 23 to 28, v, 97. (*A. E. E.*)

AMMOBATES, sp. ?

- ♂ 1. La Calle, 9, vii, 96. (*A. E. E.*)

SCHMIEDEKNECHTIA ORANIENSIS, Friese.

- ♀ 1. Constantine, 15, vi, 98. (*F. D. M.*)

PHIARUS SCRIPTUS, Gerst.

- ♀ 1. Biskra, near railway, Kilom. 108, 17, v, 94, "asleep holding on by its mandibles to a twig of *Deverra scoparia*. When alarmed extending all its legs upwards with a warning buzz like *Bombus*, but *Bombus* only holds up some of its legs at a time." (*A. E. E.*)

There seems to have always existed a great deal of confusion about Smith's *Phileremus melectoides*. This is unquestionably identical with *Ammobates oranienensis*, Lep. Smith distinctly says it has two jointed maxillary palpi, which fact at once separates it from *Phiarus* which has six joints to those organs. Besides this I have an example from *Albania* named by Smith himself.

EPEOLUS FALLAX, Mor.

- ♂ 1. La Calle, sandhills west of the town, 19, vii, 96.
(*A. E. E.*)

EPEOLUS AUREOVESTITUS, Dours.

- ♀ 1. Biskra, 10, vi, 98. (*F. D. M.*)

EPEOLUS, sp. ? (? male of preceding).

- ♂ 1. Biskra, 3, vi, 98. (*F. D. M.*)

EPEOLUS SUBRUFESCENS, n. sp.

Caput et thorax nigra, supra pilis adpressis ochraceis, subtus albis, vestita; abdomen laete brunneum, fasciis latis ochraceis ornatum, pedes antennæ-que testacei.

Head and thorax black, so densely clothed with closely-fitting scale like hairs that the surface can hardly be seen, the clothing of the upper surface of the thorax and the vertex of the head is ochreous, that of the face and under-side of the thorax and of the post-scutellum and the propodeum white, abdomen testaceous-brown, basal segment clothed with pale ochreous hairs except a central band of bright chocolate-brown hairs which does not reach the margin on either side, 2nd segment clothed at the base with bright chocolate hairs, at the apex with a wide band of ochreous hairs which is considerably and suddenly widened at the sides, 3rd 4th and 5th almost entirely covered with ochreous hairs, antennæ and legs testaceous, wings clouded at the apex, nervures testaceous. Labrum largely punctured, its anterior margin entire or slightly sinuate, two very small tubercles are situated at about a third of the length of the labrum from its apex. Antennæ with the 2nd joint of the flagellum longer than the third, the remainder subquadrate, scutellum with the lateral teeth long, its central lobe emarginate with a well-marked angular tooth on each side, the sculpture is everywhere hidden by the closeness of the pubescence.

Long. 7 mm.

A species closely allied to *aureovestitus*, Dours, but differing so widely in colour, and in the entire bands of the abdomen that I think there is no doubt of its being distinct.

♀ 1. Biskra, 24, iv, 97. "Eyes in life brownish-agate-grey with deep-seated dark fenestrations." (*A. E. E.*)

XYLOCOPA VIOLACEA, L.

♂ ♀. Algiers, 24, ii and 13, iv, 93. (*A. E. E.*)

♀. Médéa, 26, vi, 93. (*A. E. E.*)

Dr. Longstaff took it at flowers of *Prunus*, 11, iii, 05; at flowers of a shrubby yellow *Cineraria*, at Hammam Meskoutine; at Asphodel flowers at Hamman Rhirha, 21, iii, 05.

XYLOCOPA CYANESCENS, Brullé.

♂. Médéa, on *Eryngium triquetrum*, 29, vi, 93. (*A. E. E.*)

♂. Constantine, 9, x, 93. (*A. E. E.*)

♀. Tizi Ouzou, 15, vi, 93. (*A. E. E.*)

♀. Bône, 23, iv, 96. (*A. E. E.*)

CERATINA CUCURBITANA, Rossi.

- ♂ ♀. Common in various localities (*A. E. E.* and *F. D. M.*), generally on *Echium*, but visiting *Onopordon macracanthum* at Médéa in June; *Lythrum salicaria* and *Euphorbia paralias* at Bône in August; *Centaurea* at Aine Draham in July; and *Eryngium tricuspdatum* at Azazga in September. (*A. E. E.*)

CERATINA PARVULA, Sm.

- ♀ 11. Bône, on *Centaurea scridis* and *Rubus discolor*, 31, vii to 21, viii, 97. (*A. E. E.*)

CERATINA MOCSARYI, Friese.

- ♀ 1. Médéa N. and N.E. of town, alt. about 3,000 feet, on *Onopordon macracanthum*, 1, vii, 93. (*A. E. E.*)
♀ 1. „ near Maison Berronis, alt. 2,980 feet, on *Centaurea calcitrapa*, 12, vii, 93. (*A. E. E.*)
♀ 1. „ summit of hill, north of railway-station, on an *Allium*, 14, vii, 93. (*A. E. E.*)
♀ 1. Aine Draham, 21, vii, 96. (*A. E. E.*)

CERATINA NIGROÆNEA, Gerst.

- ♀ 1. Philippeville, 20, vi, 98. (*F. D. M.*)

CERATINA CALLOSA, F.

- ♀ 1. Médéa, on *Atractylis gummifera*, 12, viii, 93. (*A. E. E.*)
♂ 1. Azazga, 31, viii, 93. (*A. E. E.*)
♀ 1. Bône, 6, xi, 93. (*A. E. E.*)
♂ 1. Constantine, visiting *Thapsus garganica*, 16, v, 95. (*A. E. E.*)
♂ 1. „ visiting *Carduus pycnocephalus*, 20, v, 96. (*A. E. E.*)
♂ 1, ♀ 3. Biskra, on *Antirrhinum ramosissimum*, 23 and 29, iii, 97. (*A. E. E.*)
♀ 1. „ on *Amberboa lippii*, 8, iv, 97. (*A. E. E.*)
♀ 1. „ on *Atractylis serratuloides*, 13, v, 97. (*A. E. E.*)
♀ 1. Bône, on *Chrozophora tinctoria*, 3, viii, 97. (*A. E. E.*)
♂ 1, ♀ 3. Constantine, 13 to 7, v, 98. (*F. D. M.*)

CERATINA CALLOSA, F, *forma minor*.

- ♂ 1. Biskra, 25, iv, 97. (A. E. E.)
 ♂ 1, ♀ 1. Bône, on *Centaurea scridis*, in cop., 2, viii, 97.
 (A. E. E.)
 ♂ 1, ♀ 1. „ on *Chrozophora tinctoria*, 3 and 11, viii,
 97. (A. E. E.)
 ♂ 2. „ on *Salsola kali*, 23, viii, 97. (A. E. E.)
 ♂ 3, ♀ 1. Médéa, 26, vi, 93. (A. E. E.)
 ♂ 3, ♀ 1. Bouira, 2, v, 98. (F. D. M.)
 ♂ 4, ♀ 2. Algiers, 19, iii to 30, iv, 98. (F. D. M.)
 ♂ 1. Philippeville, 21, vii, 98. (F. D. M.)

CERATINA DALLATORREANA, Friese.

- ♂ 1. Tizi Ouzou, on *Echium*, 14, vi, 93. (A. E. E.)
 ♀ 1. Bône, on *Salsola kali*, 23, viii, 97. (A. E. E.)
 ♀ 2. „ 30, iv, 96 and 31, vii, 97. (A. E. E.)
 ♀ 1. Azazga, 30, viii, 93. (A. E. E.)

PARADIOXYS MORICEL, Friese.

- ♂ 1, ♀ 2. Biskra, in railway-cutting, near Kilom. 199, entering burrows of *Osmia rubricrus* in sandy soil rather caked on the surface. ♂ and ♀ taken in cop., 21, iv, 95. (A. E. E.)
 ♂ 3, ♀ 8. As above, 24 and 25, iv, 97. Eyes ♂ olive-grey, ♀ olive-brown, with the usual deep-seated fenestrations. (A. E. E.)
 ♂ 1. Biskra, at flowers of *Zizyphus lotus*, 29, iv, 95. (A. E. E.)
 ♂ 3, ♀ 3. „ in company with *Osmia rubricrus*, 6 to 12, v, 98. (F. D. M.)

DIOXYS CINCTA, Jur.

- ♀ 1. Bône, 10, vi, 96. (A. E. E.)
 ♀ 1. Sidi Ferruch near Algiers, 8, v, 93. (A. E. E.)
 ♂ 7. Algiers, 5 to 11, iv, 98. (F. D. M.)

DIOXYS ROTUNDATA, Per.

- ♀ 1. Biskra, visiting *Brassica napus*, 27, ii, 97. (A. E. E.)
 ♀ 1. Algiers, 30, iv, 98. (F. D. M.)

CÆLIOXYS, sp. ?

- ♀ 1. Constantine on M'cid near the Jewish Cemetery, visiting *Convolvulus lineatus*, 9, v, 95. (A. E. E.)

CÆLIOXYS AFRA, Lep.

- ♀ 1. Tizi Ouzou, in the public gardens, entering burrow,
 "Eyes dark brown," 14, vi, 90. (*A. E. E.*)

CÆLIOXYS COTURNIX, Per. ?

Of this species only the ♀ is described by Perez. The ♂ may be known from that of *hæmorrhœa* by the following characters: the shorter and more scale-like hairs of the mesonotum are evenly distributed all over the surface and not collected into spots as in *hæmorrhœa*, also the cheeks behind the eyes are clothed with scale-like hairs, whereas in *hæmorrhœa* these hairs are of the ordinary type, the transverse impressions of the abdomen are deeper and the bands are made up of several rows of scales throughout their extent, the entire base of the 7th segment is clothed with white hairs and not only its centre—beneath the whole surface is clothed with scales.

- ♂ 2, ♀ 2. Biskra, 27, v to 7, vi, 1898. (*F. D. M.*)

In both the female specimens the abdomen is red at the base.

CÆLIOXYS HÆMORRHŒA, Först.

- ♂ 1. Médéa, on *Eryngium triquetrum*, 26, vi, 93.
 (*A. E. E.*)
 ♀ 1. " " " 10, vii, 93.
 (*A. E. E.*)
 ♂ 1. Constantine " " 10, vi, 95.
 (*A. E. E.*)
 ♂ 1, ♀ 1. Médéa, on *Mentha rotundifolia*, 19, vii, 93.
 (*A. E. E.*)
 ♀ 1. Constantine, 1, x, 93. (*A. E. E.*)
 ♀ 1. Biskra, on *Ammi*, 19, vi, 97. (*A. E. E.*)
 ♂ 1. Bône, 12, viii, 97. (*A. E. E.*)
 ♂ 1. Constantine, 17, vi, 98. (*F. D. M.*)

CÆLIOXYS RUFOCAUDATA, Sm.

- ♀ 1. Le Tarf, 19, vi, 96.

"This bee sleeps head downwards, holding on to a grass-stem by its mandibles: the fore tarsi and intermediate tarsi deflexed or flexed backwards respectively in a continuous line with the tibiæ (which are folded up closely upon the femora and body), do not necessarily touch the stem, the intermediate tarsi lie obliquely across the basal joinings of the posterior femora and in a line

with the posterior tarsi, reaching to just before the base of the 1st joint in the hind tarsus. The hind tarsi from the tibiæ to the 2nd joint are connivent, and from the 3rd joint onwards parallel and contiguous with each other, are applied to the venter and reach to just beyond the apex of the 2nd ventral segment, the antennæ are sometimes porrect, and subparallel, but if the insect be slightly disturbed they become divergent. A specimen found asleep on a grass-stem on the 25th which was plucked and carried back to the house by hand, kept its place for thirty hours in an ill-lighted bedroom, when a strong daylight being admitted, it flew away." (*A. E. E.*)

CÆLIOXYS BREVIS, Ev.

- ♂ 1. Médéa, slopes of the Nador, alt. about 3,670 feet, on *Eryngium triquetrum*, 2, vii, 93. (*A. E. E.*)
 ♂ 2, ♀ 5. Biskra, 14, v to 12, vi, 98. (*F. D. M.*)
 ♂ 1, ♀ 2. „ 18 to 24, v, 97. (*A. E. E.*)
 ♀ 1. „ „
 ♂. *Biskra*. "Near the French cemetery, about 6 p.m., holding on with legs and mandibles to a twig; the tail curved upwards, and the wings so close down to the body as not to be easily distinguished, causing one to doubt if the insect were a bee or a beetle until examined with a lens. 22, v, 94. (*A. E. E.*)

CÆLIOXYS DECIPIENS, Spin.

- ♂ 1, ♀ 1. Biskra, ♂, on *Atractylis serratuloides*, 11 and 19, v, 97. (*A. E. E.*)
 ♀ 1. „ 4, v, 98. (*F. D. M.*)

CHALICODOMA SICULA, Rossi.

- ♂ ♀. Numerous specimens from various localities visiting *Echium*, *Hedysarum carnosum*, *Lavendula stæchas*, *Linaria reticulata*, and *Antirrhinum ramosissimum*, 26, ii to 22, vi. (*A. E. E.*)

(Dr. Longstaff took it in February and March 1905, on *Retama retam*, near Biskra, and on Guyotville sandhills.)

CHALICODOMA MURARIA, L.

- ♀ 5. Biskra and Constantine, visiting *Eriochilon fruticosum*, Desf., and *Ononis angustissima*, Lk., in March, *Alkanna tinctoria* in May. (*A. E. E.*)

CHALICODOMA LEFEBVREI, Lep.

- ♀ 1. Constantine, M'cid, on *Eryngium triquetrum*, 23, vi, 94. (A. E. E.)
♀ 1. Constantine, near the falls of the Roumel, 1, vi, 95. (A. E. E.)

CHALICODOMA GENEANA, Grib.

- ♀ 2. Algiers, 11 and 14, iv, 98. (F. D. M.)

CHALICODOMA NASIDENS, Friese.

- ♂ 1, ♀ 1. Biskra, 12, iv, 95 and 27, v, 93. (A. E. E.)
♂ 2, ♀ 1. " visiting *Atractylis serratuloides*, 6 to 13, v, 97.
♀ 1. " visiting *Echinops spinosus*, 8, v, 97. (A. E. E.)
♂ ♀ 1. " visiting *Antirrhinum ramosissimum*, the ♂ of a variety with hairs of apical segments red, 29, iii and 10, v, 97. (A. E. E.)

(Dr. Longstaff took 4 males of this species at Biskra, at flowers of *Retama retam*, February and March 1905.)

MEGACHILE LAGOPODA, L.

- ♂ 2, ♀ 1. Aine Draham, 21, vii, 96. (A. E. E.)
♀ 1. Médéa, on *Centaurea*, 26, vi, 93. (A. E. E.)

MEGACHILE ERICETORUM, Lep.

- ♀ 1. Constantine, visiting *Marrubium vulgare*, 21, v, 95. (A. E. E.)

MEGACHILE SERICANS, Fonsc.

- ♀. Damiette, near Médéa, on *Microlophus salmanticus*, 11, vii, 93. (A. E. E.)
♀. Médéa, on *Mentha rotundifolia*, 11, viii, 93. (A. E. E.)

MEGACHILE PICICORNIS, Friese.

- ♀. Tizi Ouzou, on the slope of Mount Beloua, on *Centaurea*, 14, vi, 93. (A. E. E.)

MEGACHILE MELANOTA, Per.

- ♂ ♀. Azazga, Forêt de Yakouren, 12 and 19, ix, 93. (A. E. E.)
♀. Sidi Ferruch, 8, v, 93. (A. E. E.)

MEGACHILE INSTERSTINCTA, Gerst.

♀ 1. Constantine, 19, vi, 98. (F. D. M.)

MEGACHILE APICALIS, Spin.

♂ 2. Médéa, 28, vi, 93. (A. E. E.)

♂ 1. Constantine, 15, vi, 94. (A. E. E.)

♂ 3. „ 8 and 16, vi, 94. (F. D. M.)

♀ 2. Between Azazga and Yakouren, on *Carlina racemosa*, 1, ix, 93. (A. E. E.)

♀ 2. Constantine, on *Inula viscosa*, 9, x, 93 and 15, x, 95. (A. E. E.)

♀ 1. Médéa, on *Scabiosa maritima*, 1, vii, 93. (A. E. E.)

♀ 2. Le Tarf, on *Cynara cardunculus*, 23, vii, 96. (A. E. E.)

♀ 2. Bône, 9, viii, 97. (A. E. E.)

MEGACHILE ARGENTATA.

♂ ♀. Many examples, vi, 93 to v, 97. Biskra, on *Pegannum harmala* in April, and on *Ammi visnaga* in May and June, and on *Daucus scitifolius* and *Mentha rotundifolia* in July. (A. E. E.)

Tizi Ouzou, on *Centaurea*, June. (A. E. E.)

Le Tarf, *Verbena officinalis* in July. (A. E. E.)

Médéa, on *Eryngium triquetrum*, July. (A. E. E.)

Azazga and Yakouren, on *Eryngium triquetrum* and *Carlina racemosa* in September. (A. E. E.)

Constantine, on *Inula viscosa*, October. (A. E. E.)

♂ ♀. Many, Constantine and Biskra, v and vi, 98. (F. D. M.)

MEGACHILE FLABELLIPES, Per.

♂ 2. Biskra, 13 and 20, iv, 95. (A. E. E.)

♀ 1. „ visiting *Traganum nudatum*, 3, iv, 95. (A. E. E.)

♀ 1. „ 28, iii, 95. (A. E. E.)

♀ 1. „ on *Diplotaxis pendula*, 30, iii, 97. (A. E. E.)

MEGACHILE XANTHOPYGA, Per.

♀ 1. Le Tarf, on *Verbena officinalis*, 24, vii, 96. (A. E. E.)

MEGACHILE ROTUNDATA, Fab.

♂ 1. Biskra, on *Ammi visnaga*, 24, v, 93. (A. E. E.)

♂ 1, ♀ 3. „ 4 and 19, v, 98. (F. D. M.)

MEGACHILE SCHNABLI, Rad. ?

♀ 1. Biskra, on *Ammi visnaga*, 15, vi, 97. (A. E. E.)

MEGACHILE FLAVIPES, Sm.

♂ 1, ♀ 3. Biskra, on *Ammi visnaga*, 20 to 26, v, 97.
(A. E. E.)

♂ 1, ♀ 1. „ 23, v and 6, vi, 98. (F. D. M.)

LITHURGUS CHRYSURUS.

♂ 2. Tizi Ouzou, on *Centaurea*, 24, vi, 93. (A. E. E.)

♀ 3. Médéa, on *Centaurea calcitrapa* and *Microlonchus salmanticus*, 11 and 31, vii, 94. (A. E. E.)

♀ 1. Médéa, near Aine Souk, on *Mentha rotundifolia*, 21, vii, 93. (A. E. E.)

♂ 5, ♀ 5. Philippeville, 20, vi, 98. (F. D. M.)

OSMIA KOHLII, Ducke.

♂ 5, ♀ 5. Biskra, about walls of "adobe" in the village Negre, 13 and 23, ii, 94, and 19, ii, 97.
(A. E. E.)

♂ 2. „ on *Periderca fuscata*, 15 and 21, ii, 95.
(A. E. E.)

♀ 2. „ visiting *Antirrhinum ramosissimum*, 1, iii, 97. (A. E. E.)

♂ 1. Hippône, 3, iv, 96. (A. E. E.)

♂ 1. Bône, 2, iii, 96. (A. E. E.)

♂ 5, ♀ 1. Algiers, 17, iii to 14, iv, 95. (F. D. M.)

(Dr. Longstaff took a ♀ of this species at Biskra on an aromatic umbellifer, and another ♂ and ♀ on *Jasminium fruticans* at Hammam Rhirha, 30, iii, 05.)

OSMIA VIDUA, Gerst.

♂ 2. Biskra, on *Ammi visnaga*, 25 and 30, v, 93.
"Eyes in life greenish-grey or greyish."
(A. E. E.)

♂ 14. Algiers, 14, iii to 23, iv, 98. (F. D. M.)

OSMIA DIVES, Mocs.

♀ 2. Médéa, slopes of the Nador, on *Onopordon macracanthum*, 2, vii, 93. (A. E. E.)

OSMIA TARFENSIS, n. sp.

O. viduæ affinis, nigra, vertice et mesonoto fulvo hirtis, thorace infra pallide hirto, abdominis segmentorum marginibus posticis fasciis angustis albo pubescentibus ornatis, scopa ventrali nigra.

♀. Black, vertex and thorax above clothed with fulvous hairs, face with a triangular patch of white hairs on each side, sides of the propodeum and thorax beneath clothed with very pale ochreous hairs, abdomen with a spot on each side of the basal segment almost meeting along the posterior margin and a narrow apical band on the next 4 segments, clothed with pale ochreous pubescence, 6th entirely clothed with whitish hairs, ventral brush black, legs clothed with pale hairs, calcaria dark pitchy, nearly black. Mandibles tridentate, more or less clothed outwardly with golden pubescence, clypeus regularly and closely punctured, rounded at the sides and more or less truncate in front, with a very slightly projecting angle where the sides meet the truncature. Antennæ with the 2nd joint of the flagellum nearly as long as the two following together, and about half as long again as the 1st, the rest of the joints subquadrate, looking rather longer than wide, mesonotum dull, very closely punctured, propodeal area shining, wings slightly brownish, abdomen slightly shining, closely and evenly punctured.

Long. 8 mm.

A small compact species, allied to *vidua* but quite different in the close puncturation, entire bands, etc.

♀ 7. Le Tarf, on *Cynara cardunculus*, 22 and 24, vii, 96, (A. E. E.)

OSMIA DECEMSIGNATA, Rad.

♀ 1. Biskra, on *Centaurea*, 3, v, 94. (A. E. E.)

♀ 1. " on *Amberboa lippii*, 8, iv, 95. (A. E. E.)

♀ 1. Médéa, about to cut a leaf of *Cytisus*, 10, vii, 93. (A. E. E.)

♀ 2. " on *Centaurea calcitrapa*, 12, vii, 93. (A. E. E.)

♀ 1. " on dead herbage, 29, vii, 93. (A. E. E.)

♀ 1. Constantine on M'cid, visiting *Carduus pteracanthus*, 9, v, 95. (A. E. E.)

♀ 2. Algiers, 19, iv, 98. (F. D. M.)

♀ 1. Constantine, 18, vi, 98. (F. D. M.)

OSMIA NOTATA, F.

♂ 2, ♀ 2. Mustapha Supérieur, amongst *Centaurea seridis*, *Echium* and a *Labiata*, 4, v, 93. (A. E. E.)

- ♀ 1. Constantine on M'cid, on *Eryngium triquetrum*, 7, vi, 93. (*A. E. E.*)
 ♂ 1. Algiers, 4, iv, 98. (*F. D. M.*)
 ♀ 1. Philippeville, 20, vi, 98. (*F. D. M.*)

OSMIA MELANOTA, Mor. ?

- ♀. † Biskra, visiting *Retama retam*, 15, ii, 95. (*A. E. E.*)
 ♀. " " *Caligonum comosum*, 28, iii, 95. (*A. E. E.*)
 ♀ 4. " on *Antirrhinum ramosissimum*, 21 and 29, iii, 97. (*A. E. E.*)
 ♀ 1. " on *Amberboa lippii*.

An entirely black species with greyish hairs intermixed with black on the vertex of the head and the thorax.

OSMIA LATREILLEI, Spin.

- ♂ ♀. Biskra, many specimens, February to April.
 ♂. " visiting *Periderca fuscata*, 15, ii, 94.
 ♂ 1, ♀ 2. " " *Amberboa lippii*, 11, iv, 95.
 ♀. " nesting in "adobe" walls village Nègre, 27, ii, 97. (*A. E. E.*)
 ♀. Fontaine Chaude, on *Tamarix pauciovulata*, 19, iv, 94. (*A. E. E.*)
 ♂ 2. Bône, 2 and 16, iii, 96. (*A. E. E.*)
 ♂ 5, ♀ 3. Algiers, 14, iii to 19, iv, 98. (*F. D. M.*)

OSMIA FULVIVENTRIS, Pz.

- ♂ 4. Algiers, 4 to 25, iv, 98. (*F. D. M.*)

OSMIA LEAIANA, Kirb.

- ♂ 1. Bône, 15, v, 96. (*A. E. E.*)
 ♀ 1. Le Tarf, 16, vi, 96. (*A. E. E.*)

OSMIA CÆRULESCENS, L.

- ♂ 3. Bône, 2 to 26, iii, 96. (*A. E. E.*)
 ♂ 1, ♀ 1. Hippône, 8, iii and 3, iv, 96. (*A. E. E.*)
 ♀ 4. Bône, on *Echium italicum*, 6, iv and 1, v, 96. (*A. E. E.*)
 ♀ 1. Biskra, on *Antirrhinum ramosissimum*, 21, iii, 92. (*A. E. E.*)
 ♂ 8. Algiers, March and April 98. (*F. D. M.*)
 ♂ 1. Constantine, 17, vi, 98. (*F. D. M.*)
 ♀ 13. Algiers, 12 to 30, iv, 98. (*F. D. M.*)

OSMIA PUNICA, Per.

♂ 7. Algiers, 4 to 14, iv, 98. (*F. D. M.*)

OSMIA SUBMICANS, Mor.

♀ 1. Constantine, on *Thymus lanceolatus* var. *Kabylicus*, 11, vi, 94. (*A. E. E.*)

♂ 5, ♀ 1. Algiers, 14, iii to 5, iv, 98. (*F. D. M.*)

♂ 1. Le Tarf, 26, iii, 96. (*A. E. E.*)

OSMIA LOBATA, Friese.

♂ 1. Algiers, 7, iv, 98. (*F. D. M.*)

OSMIA GALLARUM, Spin.

♂ 4. Algiers, 6 to 23, iv, 98. (*F. D. M.*)

OSMIA VERSICOLOR, Ltr.

♂ 1. Constantine on M'cid, 14, v, 95. (*A. E. E.*)

OSMIA FERRUGINEA, Ltr.

♀ 5. Bône, a snail-shell species, visits *Senecio leucanthemifolius*, 23, iii, 96. (*A. E. E.*)

♀ 2. „ along the coast, on *Erodium* and *Lotus prostratus*, 9, iv, 96. (*A. E. E.*)

♂ ♀. Algiers, many examples, 11 to 22, iv, 98. (*F. D. M.*)

OSMIA ANDRENOIDES, Spin.

♂ 2, ♀ 1. Constantine, 16 and 17, vi, 98. (*F. D. M.*)

♀ 1. Algiers, 29, iv, 98. (*F. D. M.*)

OSMIA, sp. ?

♀ 1. Le Tarf, 23, vi, 96. (*A. E. E.*)

A peculiar species in the form of the clypeus which is somewhat bilobed at the apex, and has a deep impression on each side near the base where it joins the cheek. In general appearance it rather resembles a small *bidentata* but the scutellum is simple. I refrain from describing it as I have only seen a single ♀.

OSMIA RUFIGASTRA, Lep.

♂ 1, ♀ 6. Algiers, 30, iv, 98. (*F. D. M.*)

OSMIA TRICOLOR, n. sp.

Nigra, clypei apice, vertice, mesonoto et postscutello late fulvo-hirtis, clypei basi, thoracis et propodei lateribus niveo hirtis, area propodeali nitida. Abdomen nitidum punctatum, marginibus posticis fasciis latis, in segmentis 1, 2, 3 late interruptis in 4 et 5 completis niveis ornatis, scopa albida.

♀. Black. Mandibles outwardly, apex of clypeus, vertex, mesonotum including the scutellum, and also the postscutellum clothed with bright fulvous red hairs, base of the clypeus, face, thorax at the sides and sides of the propodeum, a short, rather wide lateral band at the apex of the 1st, 2nd and 3rd abdominal segments, and an entire band on the 3rd and 4th clothed with snowy-white hairs, wings dusky, nervures rufo-testaceous at the base, brown otherwise, tegulae bright rufo-testaceous, legs clothed with white hairs, apical joints of the tarsi testaceous, ventral brush whitish. Head closely punctured, mandibles tridentate, antennae short, 1st joint of the flagellum longer than the 2nd, 2nd wider than long, 3rd twice as wide as long, the following joints lengthening in their proportions the penultimate joint nearly quadrate, surface of thorax where visible slightly shining, largely punctured, the punctures nearly as wide as the intervals, propodeal area shining; abdomen shining finely punctured.

Long. $6\frac{1}{2}$ –7 mm.

A small compact species, whose colour will distinguish it from any other which I can find described.

♀ 3. Biskra, on *Reseda*, 21, iii, 97. (A. E. E.)

OSMIA MORICEI, Friese.

♂ 2. Biskra, Route des Ziban, on *Ammi visnaga*, 18, v, 93. (A. E. E.)

♀ 1. „ grounds of Château Laudon, on *Ammi visnaga*, “eyes sap green,” 24, v, 93. (A. E. E.)

♀ 1. „ road to Hamman es Salahin, visiting *Peganum harmala*, 22, iv, 95.

♀ 1. „ near railway, Kilom. 199, 12, iv, 95. (A. E. E.)

♂ 3, ♀ 8. „ 4 to 7, v, 98. (F. D. M.)

OSMIA TRANSCASPICA, Mor.

♂ 2, ♀ 9. Biskra, on *Antirrhinum ramosissimum*, 1, iii and 21, iii, 97. (A. E. E.)

OSMIA LÆVIFRONS, Mor.

- ♂ 1, ♀. Biskra, in the grounds of Château Landon, 8 to 10 a.m. "♂ eyes greenish in life ♀ whitish-grey," 24, v, 93. (*A. E. E.*)
- ♂ 1. " near Kilom. 199, visiting *Amberboa lippii*, 8, iv, 95. (*A. E. E.*)
- ♂ 1, ♀ 1. " 9, v, 98. (*F. D. M.*)

OSMIA RUBRICRUS, Friese.

- ♂ 1, ♀ 1. Biskra, Fontaine Chaude, on the Dunes near the stream, on *Limoniastrum Guyonianum*, 9, v, 94. (*A. E. E.*)
- ♂ 5, ♀ 3. " near railway, Kilo 199, among bushes of *Limoniastrum Guyonianum* and *Nitraria tridentata*. Eyes black or brownish; "burrows in sandy soil rather caked on the surface after rain," 21, iv, 95 and 8 to 25, iv, 97. (*A. E. E.*)
- ♂ 4, ♀ 12. " 6 to 19, v, 98. "This *Osmia* nests in flat sand and like *papaveris* lines its cells with pink flowers of a tall shrub." (*F. D. M.*)

Both Mr. Eaton and Mr. Morice found *Paradiocys moricei* associating with this species.

OSMIA BISULCA, Gerst.

- ♀ 1. Médéa, on *Eryngium triquetrum*, 29, vi, 93. (*A. E. E.*)

OSMIA SAUNDERSII, Vach.

- ♀ 1. Sidi Ferruch, 8, v, 93. (*A. E. E.*)
- ♀ 1. Le Tarf, on *Centaurea napifolia*, 17, vi, 96. (*A. E. E.*)
- ♂ 1. Biskra, 26, ii, 97. (*A. E. E.*)
- ♂ 8, ♀ 6. Algiers, 6 to 30, iv, 98. (*F. D. M.*)

OSMIA CRENULATA, Mor.

- ♂ 2, ♀ 4. Biskra, on *Antirrhinum ramosissimum*, 21 and 29, iii, 97. (*A. E. E.*)
- ♀ 1. Constantine, on *Echium italicum*, 21, v, 95. (*A. E. E.*)

- ♀ 1. Biskra, on *Amberboa lippii*, 8, iv, 97. (A. E. E.)
♀ 1. „ on *Limoniastrum feci*, 16, iv, 95.
(A. E. E.)

OSMIA VAULOGERI, Per. ?

- ♂ 2. Algiers, 19, iv, 98. (F. D. M.)

OSMIA FERTONII, Per.

- ♂ 6, ♀ 4. Algiers, 20 to 30, iv, 98. (F. D. M.)

OSMIA SPINOLÆ, Schk.

- ♂ ♀. Numerous. Algiers, iii and iv, 98. F. D. M.

OSMIA, sp. ?

- ♀ 1. Biskra, 13, iv, 95. (A. E. E.)

Allied to *Spinolæ* but clypeus with a distinct central carina.

OSMIA MORAWITZI, Per.

- ♂ 1. Constantine, on *Thapsia garganica*, 19, v, 95.
(A. E. E.)

- ♂ 1. „ on *Echium italicum*, 21, v, 95.
(A. E. E.)

- ♀ 3. Bône, on *Echium italicum*, 6, iv, 96. (A. E. E.)

- ♀ 2. „ 9, iii and 14, v, 96. (A. E. E.)

- ♀ 1. Azazga, alt. about 1,420 ft., 13, vi, 93. (A. E. E.)

- ♂ ♀. Many specimens, Algiers, iii and iv, 98. (F. D. M.)

OSMIA ADUNCA, Pz.

- ♂ 4. Algiers, on *Echium*, 5, iv, 93. (A. E. E.)

- ♂ 3. Constantine, on *Echium*, 23, v, 95. (A. E. E.)

- ♂ 3. „ 22, v, 95. (A. E. E.)

- ♂ 2, ♀ 1. „ on *Echium*, 29, v, 95. (A. E. E.)

- ♀ 1. Hussein Dey, on *Echium*, 4, iv, 93. (A. E. E.)

- ♀ 1. Mustapha Supérieur, on *Echium*, 4, v, 93.
(A. E. E.)

OSMIA LEPELETIERII, Per.

- ♀ 1. Constantine, on *Echium italicum*, 21, v, 95.
(A. E. E.)

OSMIA, sp. ?

- ♀ 1. Constantine, visiting *Echium italicum*, 21, v, 95.
(A. E. E.)

One of the *adunca* group but with a very finely and closely punctured abdomen.

OSMIA, sp. ?

♂ 1. Biskra, 13, iv, 95. (*A. E. E.*)

Another of the *adunca* group, but impossible from a single specimen to locate for certain. *Calcaria* pale.

OSMIA LATIVENTRIS, Friese.

♂ 2, ♀ 1. Algiers, 14 and 23, iv, 98. (*F. D. M.*)

OSMIA, sp. ?

♀. Constantine, on *Echium italicum*, 21, v, 95. (*A. E. E.*)

A species resembling the *adunca* group but with pale *calcaria* and large bright and shining propodeal area.

OSMIA EPEOLIFORMIS, Ducke.

♀ 1. Biskra. "Eyes blackish or brownish-black." 13, iv, 95. (*A. E. E.*)

♀ 2. " on *Atractylis scerratuloides*, 13, v, 97. (*A. E. E.*)

OSMIA GRACILICORNIS, Per.

♀ 5. El Guerrah, 3, v, 93. (*F. D. M.*)

OSMIA TUNENSIS, Lep.

♀ 1. Constantine, visiting *Silybum marianum* and *Galactites tomentosa*, 7, v, 95.

♀ 1. " visiting *Galactites tomentosa*, 15, v, 95. (*A. E. E.*)

OSMIA DISSIMILIS, Friese.

♂ 1. Algiers, on *Echium*, 18, iv, 93. (*A. E. E.*)

♂ 3, ♀ 1. Bône, 9, iii to 26, v, 96. (*A. E. E.*)

♀ 1. Constantine, 2, vi, 95. (*A. E. E.*)

♀ 1. " visiting thistles, 18, v, 95. (*A. E. E.*)

♀ 1. " visiting *Phlomis herba-venti*, 19, v, 95. (*A. E. E.*)

OSMIA AURULENTA, Pz.

♀ 1. Médéa, on *Onopordon macracanthum*, 4, vii, 93. (*A. E. E.*)

OSMIA FOSSORIA, Per.

- ♂ 1, ♀ 1. Bône, visiting *Senecio leucanthemifolius*, 23,
iii, 96. (A. E. E.)
♀ 1. „ inhabits snail-shells, 4, iii, 96. (A. E. E.)
♀ 1. „ 26, v, 96. (A. E. E.)
♂ 1, ♀ 1. „ 13, iv, 03. (A. E. E.)
♂ 2. Algiers, 29 and 30, iv, 98. (F. D. M.)

OSMIA ACUTICORNIS, Duf. and Perr.

- ♂ 1. Algiers, 12, iv, 95. (F. D. M.)

OSMIA DIVERSA, Friese (MS.) ?

- ♀ 1. Biskra, 6, v, 91. (F. D. M.)

OSMIA RUFISCOPA, Friese.

- ♀ 2. Biskra, 6, v, 98. (F. D. M.)

OSMIA FREYGESSNERI, Friese.

- ♂ 2, ♀ 1. Biskra, near railway, Kilom. 199, 13, iv, 95.
(A. E. E.)
♂ 6, ♀ 4. „ 4 to 11, v, 98. (F. D. M.)

OSMIA HARTLIEBI, Friese.

- ♂ 1. Fontaine Chaude, 31, iii, 94. (A. E. E.)

OSMIA PARVULA, Duf. and Perr.

- ♀ 1. Constantine, 6, vi, 95. (A. E. E.)

OSMIA NASUTA, Friese.

- ♀ 1. Biskra, 9, v, 98. (F. D. M.)

OSMIA PINGUIS, Per.

- ♂ 1. Biskra, near railway, Kilom. 199, visiting *Amberboa*
lippii, 8, iv, 95. (A. E. E.)
♂ 1. La Calle, 4, vii, 96. (A. E. E.)

OSMIA BIDENTATA, Mor.

- ♀ 1. Tizi Ouzou, Mount Beloua towards the Monument
by the path to Maison Forestier, 4, vi, 93.
(A. E. E.)

OSMIA EXENTERATA, Per.

- ♀ 1. Constantine, visiting *Nigella sativa*, 2, vi, 95.
 (A. E. E.)
 ♂ 1. Algiers, 14, iv, 98. (F. D. M.)
 ♂ 1. El Guerrah, 3, v, 98. (F. D. M.)

ERIADES TRUNCORUM, L.

- ♂ 1. La Calle, on *Echium*, 9, vii, 96. (A. E. E.)
 ♂ 1. Sidi Ferruch, on *Echium*, 8, v, 93. (A. E. E.)

ERIADES RUBICOLUS, Per.

- ♂ 1. Azazga, 30, viii, 93. (A. E. E.)
 ♀ 2. Biskra, 3, vi, 93 and 7, v, 97. (A. E. E.)
 ♀ 3. Médéa, near Damiette, on *Pulicaria dysenterica*, 5,
 vii, 93. (A. E. E.)
 ♀ 1. Bône, 10, viii, 97. (A. E. E.)

ANTHIDIUM INTERRUPTUM, F.

- ♂ 1. Sidi Ferruch, on *Echium*, 8, v, 93. (A. E. E.)
 ♂ 2. La Calle, visiting *Scabiosa rutæifolia*, 18, vii, 96.
 (A. E. E.)
 ♂ ♀. La Calle, 19, vii, 96. (A. E. E.)
 ♂. Le Tarf, 17, vi, 96. (A. E. E.)

ANTHIDIUM LATICEPS, Mor.

- ♂ 1. Constantine, 11, vi, 94. (A. E. E.)

ANTHIDIUM BELLICOSUM, Lep.

- ♀ 2. La Calle, 4 and 8, vii, 96. (A. E. E.)
 ♀ 1. Biskra, Col de Sfa, on *Teucrium polium*. Eyes in
 life reddish olive-brown. 2, vi, 93. (A. E. E.)

ANTHIDIUM AFRUM, Lep.

- ♂ 1. Médéa, under Kef-el-Ahmeur up to 2,300 ft., on
Carlina racemosa, 17, viii, 93. (A. E. E.)
 ♀ 1. Tizi Ouzou, on the slopes of Mount Belona, on
Echinops, 14, vi, 93. (A. E. E.)
 ♀ 1. Biskra, 30, v, 97. (A. E. E.)
 ♂ 1. „ 31, v, 98. (F. D. M.)

ANTHIDIUM FERRUGINEUM, F.

- ♀ 1. La Calle, 19, vii, 96. (A. E. E.)

ANTHIDIUM LATREILLEI, Lep.

- ♂ 2, ♀ 2. Médéa, on *Eryngium triquetrum*, 26 and 28, vi, 93. (A. E. E.)
 ♂ 1. Constantine, on *Atractylis gummifera*, 1, x, 93. (A. E. E.)
 ♂ 3, ♀ 2. Biskra, 28, v, 93 and 12 to 19, v, 97. (A. E. E.)
 ♂ 3. „ on *Atractylis serratuloides* and *Ammi visnaga*, 13 and 31, v, 97. (A. E. E.)
 ♂ 1. „ on *Eryngium ilicifolium*, 18, vii, 97. (A. E. E.)
 ♂ 3, ♀ 8. „ 23, v to 6, vi, 98. (F. D. M.)

ANTHIDIUM STICTICUM, F.

- ♂ 2, ♀ 1. Algiers, Hussein Dey, 4 and 15, iv, 93. (A. E. E.)
 ♀ 1. „ Colonne Voirol, 4, v, 93. (A. E. E.)
 ♂ 1, ♀ 1. Constantine, on *Onobrychis venosa*, 12, vi, 94. (A. E. E.)
 ♀ 1. Bône, 16, iii, 96. (A. E. E.)
 ♂ 4, ♀ 9. Algiers, 6 to 30, iv, 98. (F. D. M.)

ANTHIDIUM SICULUM, Spin.

- ♂ 3, ♀ 1. Constantine, on M'cid, a common species visiting *Centaurea*, thistles and *Convolvulus tricolor*, 13, v, 95. (A. E. E.)
 ♀ 2. Bône, 16, iii and 1, v, 96. (A. E. E.)
 ♀ 1. Constantine, visiting *Silybum marianum* and *Galactites tomentosa*, 7, v, 95. (A. E. E.)
 ♂ 1. Algiers, 30, iv, 98. (F. D. M.)
 ♀ 2. Constantine, 15, iv, 98. (F. D. M.)

ANTHIDIUM STRIGATUM, Pz.

- ♂ 2, ♀ 1. Constantine, on *Daphne guidum*, 4, x, 93. (A. E. E.)
 ♀ 1. „ on *Ononis viscosa*, 6, vi, 95. (A. E. E.)
 ♂ 1. Le Tarf, on *Verbena officinalis*, 24, vii, 96. (A. E. E.)
 ♂ 1. Biskra, on *Atractylis serratuloides*, 11, v, 97. (A. E. E.)
 ♂ 1. „ on *Ammi visnaga*, 28, v, 97. (A. E. E.)

ANTHIDIUM MANICATUM, L.

- ♂ 1. Algiers, 3, v, 93. (A. E. E.)
 ♂ 1. Constantine, 10, vi, 95. (A. E. E.)

- ♂ 1. Médéa, on *Centaurea calcitrapa*, 12, vii, 93.
(*A. E. E.*)
♀ 1. Mustapha Supérieur, on *Echium*, 4, v, 93. (*A. E. E.*)

ANTHIDIUM DIADEMA, Ltr.

- ♂ 2. Médéa, route d'Alger, on *Centaurea nicænsis*
and *Scabiosa maritima*, 26, vi, 93.
(*A. E. E.*)
♂ 1, ♀ 1. Between Médéa and Lodi, on *Centaurea cal-*
citrapa, alt. about 2,980 ft, 12, vii, 93.
(*A. E. E.*)
♂. Médéa, under Ke-el-Ahmeur, on *Eryngium*
tricuspidatum. "Colour when alive
wasp-yellow, 17, viii, 93. (*A. E. E.*)
♂ 2. „ near Aine Souk, 29, vii, 93. (*A. E. E.*)

ANTHIDIUM KONOVII, Friese.

- ♀. Philippeville, 20, vi, 98. (*F. D. M.*)
♀. Constantine, 4, vi, 98. (*F. D. M.*)

ANTHIDIUM AFFINE, Mor.

- ♂ 2. Médéa, near Md. Ben Omar, alt. about 3,130 to
2,370 ft., on *Eryngium triquetrum* and *Scabiosa*
maritima, 11, vii, 93. (*A. E. E.*)

ANTHIDIUM AFFINE, var. *monile*, Ill.

- ♂ 1. Médéa, on *Mentha rotundifolia*, 19, vii, 93. (*A. E. E.*)
♀ 1. Le Tarf, on *Verbena officinalis*, 24, vii, 96. (*A. E. E.*)

ANTHIDIUM CINGULATUM, Ltr.

- ♂ 1. Médéa, on *Eryngium triquetrum*, 27, vi, 93. (*A. E. E.*)
♂ 1. „ on *Onopordon macracanthum*, 2, vii, 93.
(*A. E. E.*)
♂ 2. „ on *Inula viscosa*, 9, x, 93. (*A. E. E.*)

ANTHIDIUM LITURATUM, Pz.

- ♂ and ♀. Numerous specimens visiting *Onopordon*
macracanthum, *Centaurea calcitrapa*, *Verbena*
officinalis at Médéa in July; *Amberboa lippii*,
Ferula vesceritensis, *Atractylis serratuloides* and
Tamarix at Biskra in April and May; *Cynara*
cardunculus at Le Tarf in July. (*A. E. E.*)

ANTHIDIUM RETICULATUM, Mocs.

- ♂ 1. Between Médéa and Lodi, alt. about 2,800 ft., on
Centaurea calcitrapa, 12, vii, 93. (A. E. E.)

ANTHIDIUM STIGMATICORNE, Drs.

- ♀ 1. Biskra, north of railway, Kilom. 199, on *Teucrium
polium*, 28, v, 94. (A. E. E.)
(4th and 5th joints of the antennæ testaceous.)

STELIS ATERRIMA, Pz.

- ♂ 1, ♀ 3. Philippeville, 20, vi, 98. (F. D. M.)

STELIS CASSIOPÆA, n. sp.

S. phæopterae affinis, facie magis rotundata, capite thoraceque opacis, densissime punctatis facile distinguenda.

♂♀. So closely allied to *phæoptera*, K., that it will only be necessary to point out its differential characters. The head and thorax are much more closely punctured so that their surface is quite dull, and they are more evenly and closely clothed with grey hairs, the abdomen on the other hand in the ♀ is less closely though quite as largely punctured especially on the 3rd segment. The abdominal puncturation in the males of both species is very similar, but the 6th segment in the ♂ of *phæoptera* has a stronger apical angle. In both sexes of the new species the face is broader and therefore rounder and in the ♀ the eyes are more convergent.

Long. 7-8 mm.

- ♂ 2. Biskra, near Kilom. 199, visiting *Amberboa lippii*, 12,
iv, 95. (A. E. E.)
♀ 1. „ above the barrage, visiting *Amberboa lippii*,
8, iv, 97. (A. E. E.)
♀ 1. „ flying about “adobe” house walls, 27, ii,
97. (A. E. E.)
♂ 1. Bône, 30, iv, 96. (A. E. E.)

STELIS NASUTA, Ltr.

- ♂ 1, ♀ 1. Constantine, 13, v, 95. (A. E. E.)

STELIS VACHALI, Per.

- ♂ 1. Biskra, visiting *Antirrhinum ramosissimum*, 29, iii,
97. (A. E. E.)
♀ 1. „ on *Atractylis serratuloides*, 13, v, 97.
(A. E. E.)

STELIS, sp. ?

♀ 1. Le Tarf, visiting heads of *Cynara cardunculus*, 23, vii, 96. (*A. E. E.*)

Allied to *signata*.

STELIS, sp. ?

♂ 1. Biskra, amongst *Tamarix*, 4, iv, 97. (*A. E. E.*)

EUCERA (*Macrocera*) RUFICOLLIS, Brullé.

♂ 1. Constantine, on *Carduus macrocephalus*, 28, v, 95. (*A. E. E.*)

EUCERA (*Macrocera*) ALTERNANS, Brullé.

♂ 1, ♀ 1. Constantine, on *Alkanna tinctoria*, 28, v, 95. (*A. E. E.*)

♀ 2. „ on *Anchusa* and *Salvia patula*, 12, vi, 94. (*A. E. E.*)

♂ 9, ♀ 1. Algiers, 14 to 29, iv, 98. (*F. D. M.*)

EUCERA (*Macrocera*) TRICINCTA, Ev.

♂ 5, ♀ 5. Biskra, on *Peganum harmala*. “Eyes of ♂ sap-green,” 3 and 29, v, 94, 22, iv, 95 and 3, iv, 97. (*A. E. E.*)

♀ 7. „ 5 to 14, v, 98. (*F. D. M.*)

EUCERA (*Macrocera*) CUNICULARIA, Kl.

♂ 14, ♀ 10. Biskra, 1 ♀ visiting *Moricandia arvensis*, 14
♂ and 8 ♀ visiting *Amberboa lippii*, 11 to 27, iv, 95 and 10, ii to 26, iii, 97. “Eyes light greenish or light yellowish-green.” (*A. E. E.*)

♀. „ numerous specimens 6 to 9, v, 98. (*F. D. M.*)

EUCERA (*Macrocera*), sp. ?

♂ 2. Médéa, in bad condition on *Scabiosa maritima*, 1, vii, 93. (*A. E. E.*)

EUCERA (*Macrocera*) CINCTELLA, n. sp.

Tricinctæ affinis, sed minor, mas clypeo toto nigro, femina seg-

mentorum abdominalium apicibus concoloribus et fasciis angustioribus ornatis, distincta.

Apparently allied to *tricincta*, Ev. on account of the white apical bands of the abdominal segments, but it is a smaller and darker species and the apices of the segments are black.

♂. Face, clypeus and labrum entirely black, antennæ reaching to about the apex of the 2nd abdominal segment, vertex and mesonotum clothed with ochreous-brown hairs, wings slightly clouded, thorax beneath and propodeum clothed with paler whitish hairs. Abdomen dull, very closely punctured, basal segment clothed especially at the base with ochreous-white hairs, 2nd and following segments each with a rather narrow apical band of white hairs, apical dorsal valve punctured at the base and clothed with golden hairs towards the apex which is rounded, 6th segment with an angular tooth on each side at the apex, segments beneath shining, punctured, their posterior margins rather widely piceous, legs simple, clothed with white hairs.

♀. Face clothed with white hairs, 1st joint of the flagellum about equal in length to the 2 following together, mesonotum clothed with rather bright brown hairs, thorax beneath and propodeum clothed with nearly white ones, abdomen closely punctured, basal segment clothed with ochreous hairs on its anterior half, its apical margin smooth and shining, 2nd and following segments with a narrow apical band of white hairs, that of the 5th golden in the centre, and the 2nd also with a line of white hairs on each side at the base, apical dorsal valve small, finely and transversely rugulose, legs clothed with white hairs.

Long. 11-12 mm.

♂ 1, ♀ 1. La Calle, 19, vii, 96. (*A. E. E.*)

♀ 1. Tizi Ouzou, Mount Beloua, alt. about 1,700 ft., on *Calamintha*, 15, vi, 93. (*A. E. E.*)

EUCERA (*Macrocera*) BRACHYCERA, Grib.

♂ 1. Biskra, visiting *Antirrhinum ramosissimum*, 21, iii, 97. (*A. E. E.*)

This ♂ agrees well with Gribodo's description. Friese when he wrote his monograph of the Palæarctic species did not know it.

EUCERA (*Macrocera*) DENTATA, Klug.

♂ 1. Biskra, visiting *Limoniastrum guyonianum*, 6, v, 97. (*A. E. E.*)

♂ 1. „ 23, v, 98. (*F. D. M.*)

EUCERA (*Macrocera*) GRAJA, Ev.

♂ 6, ♀ 2. Le Tarf, abundant on *Cynara cardunculus*, eyes in life sub-cæsius, 28, vi and 23, vii, 96. (A. E. E.)

♂ 2. „ on *Centaurea napifolia*, 27, vi, 96. (A. E. E.)

EUCERA (*Macrocera*) COMMIXTA, D. T.

♂ 3. Constantine, 13, vi, 98. (F. D. M.)

EUCERA (*Macrocera*) sp. ?

♀ 1. Le Tarf, 24, vi, 96. (A. E. E.)

EUCERA (*Macrocera*) POLLINOSA, Lep. ?

♂ 1. La Calle, 15, vii, 96. (A. E. E.)

EUCERA (*Macrocera*) LYNCEA, Moes.

♀ 2. Between Médéa and Lodi, on *Centaurea calcitrapa*, alt. 2,980 ft., 12, vii, 93. (A. E. E.)

EUCERA (*Macrocera*) RUFICORNIS, F.

♂ 4, ♀ 2. Azazga, main road towards the European Cemetery and mule-track to the right beyond. The *Eucera* was flying in some numbers about the rudiments of a dead hedge and the border of the mule-track, 30, viii, 93. (A. E. E.)

♀ 2. „ Forêt de Yakouren, on *Carlina racemosa*, 12 to 19, ix, 93. (A. E. E.)

♀ 1. Var. with clypeus almost entirely black. La Calle, 9, vii, 96. (A. E. E.)

♂ 2. Philippeville, 20, vi, 98. (F. D. M.)

EUCERA (*Macrocera*) STRIGATA, Lep.

♂ 2. Tizi Ouzou, just over the ridge of Mount Beloua, about 1,700 ft., on *Calamintha*, 15, vi, 93. (A. E. E.)

EUCERA LONGICORNIS, L. = *difficilis*, Per.

♂ 1. Bône, 15, iii, 96. (A. E. E.)

♀ 1. var. (?) Algiers, on *Antirrhinum ramosissimum*, 6, iv, 93. (A. E. E.)

EUCERA, sp. ?

- ♂ 1. Biskra, on *Antirrhinum ramosissimum*, 1, iii, 97.
(A. E. E.)

Like *longicornis* but labrum black and apical segments dull.

EUCERA ALGIRA, Lep.

- ♀ 1. Algiers, 6, iv, 93. (A. E. E.)

Dr. Longstaff took a ♂ at flowers of *Spergula*, at El Outaia, 1, iii, 05.

EUCERA CLYPEATA, Er.

- ♂ 1. Bône, Route de l'Edough, 7, iii, 96. (A. E. E.)
♂ 1. „ 9, v, 96. (A. E. E.)
♀ 1. Mustapha Supérieur, amongst *Centaurea scribis*,
Echium and a *Labiata*, 4, v, 93. (A. E. E.)
♀ 1. Constantine, visiting *Silybum marianum* and
Galactites tomentosa, 7, v, 95. (A. E. E.)

EUCERA NIGRIFACIES, Lep.

- ♂ 1. Algiers, on *Echium*, 4, iv, 93. (A. E. E.)
♀ 1. Médéa, on *Centaurea nicænsis* and *scabiosa*, 26, vi,
93. (A. E. E.)

EUCERA EUCNEMIDEA, Dours.

- ♂ 1. Constantine, visiting *Silybum marianum* and
Galactites tomentosa, 7, v, 95.
(A. E. E.)
♂ 2, ♀ 3. „ ♂ on *Carduus pteracanthus*, ♀ on
Hypochaeris glabra, 9, v, 95.
(A. E. E.)
♂ 1. „ on *Convolvulus tricolor*, 14, v, 95.
(A. E. E.)
♂ 1. Biskra, on *Amberboa lippii*, 11, iv, 95. (A. E. E.)
♀ 1. Médéa, on *Centaurea*, 26, vi, 93. (A. E. E.)
♀ 2. Constantine, 18, vi, 98. (F. D. M.)

EUCERA CASPICA, Mor.

- ♀ 3. Algiers, 9 to 23, iv, 98. (F. D. M.)

EUCERA SAUNDERSII, Friese.

- ♂ 5. Algiers, one on *Echium*, 9, iii to 4, iv, 93. (A. E. E.)
♂ 8, ♀ 6. „ 14, iii to 30, iv, 98. (F. D. M.)

- ♂ 3. Biskra, garden of Château Landon, 13, ii, 94.
(A. E. E.)
- ♂ 9, ♀ 1. „ Left of Route de Tougourt a little
beyond Château Landon, on *Periderea*
fuscata, 21, ii, 95. (A. E. E.)
- ♀ 2. Constantine on M'cid, visiting *Hypochæris glabra*.
9, v, 95. (A. E. E.)
- ♀ 1. „ visiting *Convolvulus tricolor*, 13, v, 95.
(A. E. E.)
- ♀ 3. Bône, 6, iv to 10, vi, 96. (A. E. E.)
- ♂ 3. „ visiting low plants such as *Diplotaxis*, *Linaria*
reflexa and often patches of *Arisarum vulgare*.
15 to 16, iii, 96. (A. E. E.)

EUCERA NOTATA, Lep.

- ♂ 3, ♀ 2. Algiers, on *Echium*, 9, iii to 6, iv, 93,
(A. E. E.)
- ♂ 12, ♀ 14. „ 14, iii to 23, iv, 98. (F. D. M.)
- ♂ 1, ♀ 2. Bône, 18 to 23, iv, 96, (A. E. E.)
- ♀ 1. Constantine on M'cid, visiting *Carduus*
ptercucanthus, 9, v, 95. (A. E. E.)

EUCERA GRISEA, F.

- ♂ 1, ♀ 6. Biskra, on *Amberboa lippii*, 11, 12, iv, 95,
and 8 and 13, iv, 97. (A. E. E.)
- ♀ 3. „ on *Ammi visnaga*, 28, v, 94 and 27,
v, 97. (A. E. E.)
- ♀ 1. Constantine, on *Galactites tomentosa*, 15, v,
95. (A. E. E.)
- ♀ 4. Biskra, 6, v to 11, vi, 98. (F. D. M.)
- ♀ 2. Algiers, 18, iii to 27, iv, 98. (F. D. M.)

EUCERA TRIVITTATA, Brullé.

- ♂ 1. Algiers, on *Echium*, 4, iv, 93. (A. E. E.)
- ♀ 1. „ on *Asteriscus maritimus*, 10, v, 93. (A. E. E.)
- ♀ 4. Médéa, on *Eryngium triquetrum*, 26 to 28, vi, 93,
and *Scabiosa maritima*, 1, vii, 93.
(A. E. E.)
- ♀ 3. Azazga, alt. about 1,420 ft., on *Echium*, 13, vi, 93.
(A. E. E.)
- ♀ 1. Mustapha Supérieur, amongst *Centaurea*, *Echium*
and a *Labiata*, 4, v, 93. (A. E. E.)
- ♂ 18, ♀ 5. Algiers, 18, iii to 27, iv, 98. (F. D. M.)

The specimens from Azazga and Mustapha Supérieur are much larger than the others, but they have been determined by Herr Friese as *trivittata*.

EUCERA NIGRILABRIS, Lep.

♂ 3, ♀ 4. Biskra, 1 ♂, on *Acanthyllis tragacanthoides*, 1 ♂ on *Calendula arvensis*, the rest on *Moricandia arvensis*, 2 to 8, ii, 94, 25, ii, 95, 4 to 11, ii, 97. (*A. E. E.*)

All in perfect condition with bright fulvous hairs on the base of the abdomen.

♂ ♀. Biskra, various specimens, on *Moricandia arvensis*, ii and iii, 95, 96 and 97. (*A. E. E.*)

♂ 4, ♀ 4. Bône, sandy ground skirting the sea-shore, visiting *Alkanna tinctoria*, all very melanic, 4 and 9, iii, 96. (*A. E. E.*)

EUCERA NIGRILABRIS, Lep. var. ?

♂ 1. Biskra, on *Retama retam*, 15, ii, 95. (*A. E. E.*)

Pale hairs extending over the whole surface of the abdomen. I am indebted to Herr Friese for this determination.

EUCERA FERRUGINEA, Lep.

♂ 6, ♀ 2. Bône, visiting *Lavendula stoechas*, 29, iv to 25, v, 96. (*A. E. E.*)

♀ 4. Aine Kriar, visiting *Linaria reticulata*, 20 to 22, vi, 96. (*A. E. E.*)

EUCERA ATRICORNIS, F.

♂ 3, ♀ 4. Algiers, near Mustapha Supérieur, in a field a little beyond Colonne Voirol, amongst *Centaurea*, *Echium*, and a *Labiata*, 6, iv and 4, v, 93. (*A. E. E.*)

♂ 9, ♀ 1. „ 14 to 23, iv. 98. (*F. D. M.*)

EUCERA HISPANA, Lep.

♂ 2. Constantine, visiting *Carduus macrocephalus*, 17, 18, v, 95. (*A. E. E.*) In brilliant condition

♂ 1. Bône, 23, v, 96. (*A. E. E.*) In brilliant condition.

- ♂ 1. Constantine, on *Scabiosa maritima*, 16, vi, 94, faded. (A. E. E.)
 ♂ 1, ♀ 2. Aine Draham, on *Centaurea melitensis*, 20, vii, 96, faded. (A. E. E.)
 ♀ 2. Le Tarf, on *Centaurea napifolia*, 16 and 17, vi, 96. (A. E. E.) In brilliant condition.
 ♀ 3. Médéa, on *Centaurea calcitrapa*, 26, vi and 5, vii, 93, faded. (A. E. E.)
 ♂ 4, ♀ 6. Algiers, 31, iii to 27, iv, 98. (F. D. M.)

EUCERA ATERRIMA, Friese.

- ♀ 1. Algiers, El Biar, on *Echium*, 20, iii, 93. (A. E. E.)
 ♀ 3. Bône, 4, 23, v, 96. (A. E. E.)
 ♀ 1. Algiers, 24, v, 98. (F. D. M.)

EUCERA NUMIDA, Lep.

- ♀ 1. Bône, 7, iii, 96. (A. E. E.)
 ♀ 1. Hippône, 17, iii, 96. (A. E. E.)
 ♀ 11. Algiers, 29, iii to 27, iv, 98. (F. D. M.)

EUCERA DENTIPES, sp. nov.

♂. Nigra, pilis obscuero-ochraceis dense vestita, abdominis segmentorum marginibus posticis dilutioribus, femoribus intermediis, subtus prope basin dentatis.

♂. About the size of *longicornis* and clothed much as *grisea* ♂ clypeus and labrum entirely black, antennæ rather slender, the 2nd joint of the flagellum rather longer than wide, body entirely clothed with dull ochreous hairs, those of the margins of the segments rather paler, so as to show as narrow bands, legs clothed with brighter, more rufescent hairs, the apical joints of all the tarsi testaceous, intermediate femora armed beneath towards the base on the anterior side with a strong tooth.

Long. 14 mm.

Although I have only seen this single ♂ I have described it as new as the character of the intermediate femora is so distinct that I feel sure it must be specific.

- ♂ 1. Biskra, near railway, Kilom. 199, on *Antirrhinum ramosissimum*, 26, ii, 97. (A. E. E.)

ANCYLA ORANIENSIS, Luc.

- ♂ 8, ♀ 3. Biskra, corn-lands bordering the Route des Ziban, on *Ammi visnaga*, 18 and 25, v, 93 and 28, v, 97. (A. E. E.)

- ♀ 3. Médéa, on the north slope of Koudia Sma, 8,
vii, 93. (*A. E. E.*)
♂ 9, ♀ 1. Biskra, 16 to 23, v. 98. (*F. D. M.*)

MELITURGA PICTIPES, Mor.

- ♂ 2. Biskra, 26, iv, 94. (*A. E. E.*)
♂ 3, ♀ 1. „ on *Ammi visnaga*, 23 to 28, v, 97.
(*A. E. E.*)
♂ 4, ♀ 9. „ 6 to 27, v, 98. (*F. D. M.*)

“The bees sleep at the end of a stick, or dead stem of the spurge, head and thorax downwards, clasping the stem with their legs and mandibles and resting their abdomen on the top of the stem.” (*A. E. E.*)

MELECTA LUCTUOSA, Scop.

- ♀ 3. Algiers, 9, iii to 13, iv, 93. (*A. E. E.*)
♀ 1. Biskra, entering burrows of *Anthophora fulvitaris*,
20, iii, 94. (*A. E. E.*)
♀ 2. „ 24, iii, 94 and 26, ii, 97. (*A. E. E.*)
♀ 1. Bône, 4, iii, 96. (*A. E. E.*)
♀ 1. Algiers, 9, iii, 93. (*A. E. E.*)
♀ 6. „ 17, iii to 21, iv. (*F. D. M.*)

MELECTA PLURINOTATA.

- ♀ 7. Algiers, 21 and 22, iv, 98, inquiline of *Anthophora
romandii*. (*F. D. M.*)

CROCISA MAJOR, Mor.

- ♂ 1, ♀ 1. Constantine, on *Inula viscosa*, 4, x, 93.
(*A. E. E.*)
♂ 1. Médéa, on *Mentha rotundifolia*, 19, vii, 97.
(*A. E. E.*)
♀ 1. La Calle, 15, vii, 96. (*A. E. E.*)
♂ 1. Biskra, on *Ammi*, 24, v, 97. (*A. E. E.*)
♂ 1. „ “At rest during the passing of a big
cloud, holding on to the tip of a dead twig with its
mandibles only, and having its legs tucked up, its wings
incumbent upon the body and its antennæ obliquely
porrect and subcontiguous or closely parallel with one
another.” 17, iv, 97. (*A. E. E.*)

CROCISA RAMOSA, Lep.

- ♂ 3. Biskra, 1, vi, 93, 24, iv and 13, viii, 97. (*A. E. E.*)

- ♂ 1. Médéa, on *Eryngium triquetrum*, 28, vi, 93.
 (A. E. E.)
- ♂ ♀. La Calle, on *Scabiosa rutæifolia*, 18 and 19, vii, 96.
 (A. E. E.)
- ♂. Bône, 20, viii, 96. (A. E. E.)
- ♀. Le Tarf, 24, vi, 96. (A. E. E.)

CROCISA QUADRIDENTATA, n. sp.

Nigra, antennis crassiusculis, articulis quarto et sequentibus valde transversis Capite, thorace plerumque, abdominis segmentis apicibus fasciis late niveis, medio interruptis, ornatis, segmentum primum et secundum lateribus quoque niveis et primum basi niveum mesonoti scutum postice emarginatum et angulatum, scutellum postice valde emarginatum et in angulos duos piceos productum pedibus niveo-pubescentibus.

♂. Very distinct from any other species of the genus by its more extensive pattern of snowy-white pubescence—the head, thorax except a band across the mesonotum between the tegulæ, and the greater part of the scutellum, clothed with snowy-white hairs, all the segments of the abdomen with a wide apical band of similar hairs narrowly interrupted in the middle, the 1st and 2nd segments with the sides also white-haired, and the first having its base also white, the white pubescence of the 3rd and following segments almost covers the whole of the exposed surface, legs with the apices of the femora and the tibiæ and tarsi externally clothed with white hairs, labrum piceous, antennæ very short and stout, piceous anteriorly, the basal joint clothed with snowy hairs the 3rd joint almost as long as the 4th and 5th together the 4th and following transverse, much wider than long, each joint posteriorly with a shining round impression, in this respect agreeing with *crassicornis*, Mor., mesonotum coarsely punctured, tegulæ piceous, with fine very remote punctures, wings hyaline, their apices darker, nervures dark piceous, the scutum of the mesonotum is posteriorly emarginate, and its angles are produced beyond the base of the scutellum so as to be slightly prominent, the scutellum is very largely punctured, emarginate posteriorly and produced at the sides into two sharp piceous angles, the emargination fringed with white hairs projecting from beneath—abdomen slightly shining, finely punctured, apical segment bidentate, beneath shining the segments each bearing two snowy-white spots, tarsi piceous at the apex, there appears to be no fringe on the apex of the 6th segment.

Long. 9 mm.

♂ 1. Biskra, on *Atractylis serratuloides*, 13, v, 97.
(*A. E. E.*)

Apparently closely allied to *crassicornis*, Mor., but there is no mention in the description of that species of the peculiar form of the mesonotum, and the arrangement of the white pattern on its abdomen appears to be quite different, each segment having 2 oval spots widely separated from the margin, whereas in this species they have wide bands.

ANTHOPHORA QUADRIFASCIATA, Vill.

♂ ♀. Common. (*A. E. E.* and *F. D. M.*)

♂. Visiting *Prasium majus* at Algiers in April, *Peganum harmala* at Biskra in April, *Ammi visnaga* at Biskra in May, *Echium italicum* at Constantine in May, *Calamintha* at Tizi Ouzou in June, *Atractylis gummifera* at Bône in August.

♀. „ *Centaurea calcitrapa* at Médéa in July.

♀. „ *Carlina racemosa* at Azazga in September.
(*A. E. E.*)

ANTHOPHORA GARRULA, Rossi.

♀ 1. Le Calle, 19, vii, 96. (*A. E. E.*)

ANTHOPHORA WEGENERI, Friese.

♂ 3, ♀ 1. Biskra, near rail, Kilom. 199. Visiting *Limoniastrum guyonianum* (♂ and ♀ *in cop.*) 13, iv, 95. (*A. E. E.*)

♂ 1. Biskra, on *Amberboa lippii*, 11, iv, 95. (*A. E. E.*)

♀. „ 1, vi, 98. (*F. D. M.*)

ANTHOPHORA ALBIGENA, Lep.

♂ ♀. Various localities. (*A. E. E.* and *F. D. M.*)

♂. Visiting *Centaurea* and *Scabiosa*, Médéa, June; *Mentha rotundifolia*, *Eryngium cuspidatum* and *Atractylis gummifera*, at Bône in August. (*A. E. E.*)

♀. „ *Calamintha*, at Tizi Ouzou in June.

„ *Labiata*, at Médéa in June.

„ *Solanum nigrum*, at Constantine in October.
(*A. E. E.*)

ANTHOPHORA TALARIS, Friese.

♂ 1. Biskra, visiting *Peganum harmala*, 12, iv, 95.
(A. E. E.)

ANTHOPHORA NIGRICORNIS, Mor.

♀ 1. Biskra, in a garden beside the Route de Tougourt,
1, vi, 93. (A. E. E.)

ANTHOPHORA MAGNILABRIS, Fedts.

♀ 1. La Calle, 8, vii, 96. (A. E. E.)

ANTHOPHORA FULVODIMIDIATUS, Dours.

♂ 1. Médéa, on *Centaurea calcitrapa*, eyes in life "light
sap-green," 21, vii, 93. (A. E. E.)

♀ 1. Azazga, on *Carlina racemosa*, 20, viii, 93. (A. E. E.)

ANTHOPHORA BIMACULATA, Pz.

♂ 5. Biskra, visiting *Amberboa lippii*, 11 to 13, iv, 95.
(A. E. E.)

♂ 1. Sidi Ferruch, on *Echium*, 8, v, 93. (A. E. E.)

♀ 1. Biskra, on *Ammi visnaga*, 30, v, 95. (A. E. E.)

♀ 1. Algiers, 30, v, 93. (A. E. E.)

♀ 2. Aine Draham, 21 and 22, vi, 96. (A. E. E.)

♂ 1. Biskra, 9, v, 98. (F. D. M.)

♀ 1. Constantine, 17, vi, 98. (F. D. M.)

♂ ♀. Philippeville, 20, v, 98. (F. D. M.)

ANTHOPHORA sp. ?

♀. Biskra, on *Ammi visnaga*, 30, v, 97. (A. E. E.)

ANTHOPHORA ALBOCINEREA, n. sp.

Nigra, pilis cinereo-albis dense vestita, clypei apice, labro, mandibulis-que flavis; antennarum articulo tertio quarto quinto-que simul sumptis pœne longiore abdominis apice, ventre, tarsisque infra fusco pilosis.

♀. A short compact species, entirely clothed above with white hairs very slightly tinged with grey, wings hyaline, tegulæ and wing-nervures at the base pale, the latter darker towards the apex of the wing, labrum, mandibles and the apex of the clypeus yellow, the colour produced centrally in a pale line to its base, cheeks entirely black, 2nd joint of the flagellum slightly longer than the 3rd and 4th together, mesonotum where visible through the dense

clothing of hairs very closely and finely punctured, surface of abdomen invisible in fresh specimens, but in a rubbed one seen to be very finely punctured, the apices of the segments narrowly white, 5th segment at the apex with a triangular patch of brown hairs, apical dorsal valve narrow and pointed, clothed at the sides with long brown hairs, segments beneath and tarsi inwardly clothed with brown hairs.

Long, 8. mm.

♀ 1. Biskra, on *Echium humile*, 12, iv, 97. (*A. E. E.*)

♀ 1. „ on the Sandhills, 5, v, 97. (*A. E. E.*)

Closely allied to *pubescens* but the short 2nd joint of the flagellum and the pale labrum and mandibles will easily distinguish it as well as the almost snowy-white pubescence.

ANTHOPHORA FERRUGINEA, Lep., var. *alboferruginea*, Friese.

♂ 1. Constantine, visiting *Phlomis herba-venti*, “eyes light-greyish or ashy-agate,” 19, v, 95. (*A. E. E.*)

ANTHOPHORA QUADRICOLOR, Er.

♂ 1. Le Tarf, 24, vi, 96. (*A. E. E.*)

♀ 1. Pointe Pescade near Algiers, on *Echium*, 10, v, 93. (*A. E. E.*)

ANTHOPHORA PUBESCENS, F.

♂ ♀. Algiers, on the ramparts, on *Echium*, 5, iv, 93. (*A. E. E.*)

♂ 3. Biskra, 17, iv, 94. (*A. E. E.*)

♂ 2. „ on *Moricandia arvensis*, 3, ii and 22, iv, 97. (*A. E. E.*)

♀ 1. „ on *Deverra scoparia*, 14, ii, 95. (*A. E. E.*)

♀ 2. „ on *Antirrhinum ramosissimum*, 26, ii, 97. (*A. E. E.*)

♂ 3. Algiers, 14, iii, 98. (*F. D. M.*)

♂ 1. Biskra, 6, v, 98. (*F. D. M.*)

ANTHOPHORA CALCARATA, Lep.

♂ 1. Bône, asleep, hanging on to a stem by its mandibles only, 17, xi, 93. (*A. E. E.*)

♂ 1. Tunis, 20, xii, 93. (*A. E. E.*)

- ♀ 1. Biskra, on *Zygophyllum cornutum*, 10, ii, 94.
 (A. E. E.)
 ♀ 1. " near the Blockhouse above the Barrage,
 24, iii, 94. (A. E. E.)

Dr. Longstaff took a ♂ on flowers of *Retama retam* at Biskra, 6, iii, 05.

ANTHOPHORA FULVITARSIS, Brullé.

- ♂ 1. Biskra, visiting *Lycium afrum*, 6, ii, 94. (A. E. E.)
 ♂ 2. " visiting *Moricandia arvensis*, 11 to 17, ii, 94.
 (A. E. E.)
 ♂ 1. Hippone, visiting *Cerithe aspera*, 17, iii, 96.
 (A. E. E.)
 ♂ 2. Biskra, 7 and 25, ii, 94. (A. E. E.)
 ♂ 1. Algiers, Colonne Voirol, 4, v, 93. (A. E. E.)
 ♂ 1. Bône, on *Atractylis serratuloides*, 2, v, 96. (A. E. E.)
 ♀ 1. Biskra, burrowing in a bank by the market-garden,
 20, iii, 94. (A. E. E.)
 ♂ 2, ♀ 2. Algiers, March and April 1908. (F. D. M.)

Dr. Longstaff found it common at Biskra, hovering at flowers of broad-beans, February 1905.

ANTHOPHORA CRINIPES, Sm.

- ♂ 1. Biskra, Village Nègre at *Acanthyllis tragacanthoides*,
 19, ii, 97. (A. E. E.)

Dr. Longstaff took 4 ♀♀ hovering over flowers of *Acanthyllis tragacanthoides* at Biskra, 16, ii, 05; 2 ♀♀ on the same plant at Hamman es Salahin, 17, ii, 05; and a ♂ and ♀ at flowers of *Asphodel* and *Cynoglossum*, 12, iii, 05.

ANTHOPHORA AMBIGUA, Per.

♂ Biskra, stony hills north-west of the town, visiting *Acanthyllis tragacanthoides*. "This species is common in the desert, vigilant and very swift on the wing, hovering and darting off at the least alarm like *Macroglossa stellatarum* or *Plusia gamma*; in the intervals of business they alight to bask on stones, sometimes hovering down, after the manner of small *Syrphidæ* approaching flowers, their hum is nearly of the same pitch as that of an excited hive-bee. I once found one asleep under a stone towards evening." 27, i, 94. (A. E. E.)

♀ 1. Biskra, rocky edges beyond the Parc de Beni Mora,
on *Acanthyllis tragacanthoides*, 6, ii, 94.
(*A. E. E.*)

♀ 2. „ 5, iii, 95 and 4, ii, 97. (*A. E. E.*)

♂ 1. „ 7, i, 97. (*A. E. E.*)

Dr. Longstaff took it on *Vicia* sp. at Biskra, and *Spergula*
sp. at El Outaia, February and March 1905.

ANTHOPHORA ROBUSTA, Klug.

♂ 1, ♀ 1. Constantine, visiting *Echium italicum* ♂, 22,
v, 95; ♀, 16, vi, 94. (*A. E. E.*)

♀ 2. „ 18, vi, 98. (*F. D. M.*)

ANTHOPHORA HISPANICA, F.

♂ 1. Bône, base of Mount Edough beyond the Orphelinat,
visiting *Asphodelus microcarpus*, 26, ii, 96.
(*A. E. E.*)

♀ 4. „ visiting *Cerintho aspera*, 22, iii, 96. (*A. E. E.*)

ANTHOPHORA DISPAR, Lep.

♂ 1. El Biar, near Algiers, 17, ii, 93. (*A. E. E.*)

♂ 3. Bône, 26, ii and 2, iii, 96. “Eyes in life obscurely
subolivaceous with the usual deep-seated coarse
shady reticulation.”

♀ 1. Algiers, on *Echium*, 9, iii, 93. (*A. E. E.*)

♂ 2, ♀ 5. „ 14, iii to i, iv, 98. (*F. D. M.*)

Dr. Longstaff took it on asphodel and cherry-blossoms
at Bougie, March 1905.

ANTHOPHORA NIGROCINCTA, Lep.

♂ 1. Biskra, on *Acanthyllis tragacanthoides*, 2, ii, 94.
(*A. E. E.*)

♂ 1. Bône, visiting *Asphodelus microcarpus*. “Eyes black
opaque.” 26, ii, 96. (*A. E. E.*)

ANTHOPHORA VENTILABRIS, Lep.

♂ 1. Biskra, near M'cid, 7, ii, 94. (*A. E. E.*)

♂ 1. „ about walls of “adobe” in village Nègre,
13, ii, 94. (*A. E. E.*)

♀ 2. „ on *Moricandia*, 17, ii, 94 and 25, iii, 95.
(*A. E. E.*)

ANTHOPHORA ATRICEPS, Per.

- ♂ 1, ♀ 1. Biskra, on *Moricandia arvensis*, 10, ii, 97 and 25, iii, 95. (*A. E. E.*)
 ♂ 1. „ on *Acanthyllis tragacanthoides*, 12, ii, 97. (*A. E. E.*)
 ♂ 4. „ on *Antirrhinum ramosissimum*, 26, ii and 21, iii, 97. (*A. E. E.*)

Dr. Longstaff took it on *Spergula* at El Outaia, 1, iii, 05.

ANTHOPHORA ROMANDII, Lep.

- ♂ 4, ♀ 9. Algiers, the host of *Melecta plurinotata*, 14 to 22, iv, 98. (*F. D. M.*)

ANTHOPHORA ALBOSIGNATA, Friese.

- ♂ 1. Biskra, on *Picridium vulgare*, 11, iv, 97. (*A. E. E.*)

ANTHOPHORA BICILIATA, Lep.

- ♂ 1. Algiers, 6, iv, 93. (*A. E. E.*)
 ♀ 1. Hussein Dey, near Algiers, on *Echium italicum*, 4, iv, 93. (*A. E. E.*)
 ♀ 1. Hippône, on *Cerintho aspera*, 17, iii, 96. (*A. E. E.*)
 ♂ 4, ♀ 8. Algiers, 14, iii to 25, iv, 98. (*F. D. M.*)

ANTHOPHORA RETUSA, L.

- ♂ 2. Bône, 11, v, 96. (*A. E. E.*)
 var. with all the abdominal segments brown-haired.

ANTHOPHORA ATROALBA, Lep.

- ♂ ♀. Numerous from Algiers, Hippône, Tunis, Bône. (*A. E. E.* and *F. D. M.*) ♀ visiting *Echium* in April; *Cichorium intybus* and a *Labiata* and *Lavendula stoechas* in May; *Cerintho aspera* in March. (*A. E. E.*)

ANTHOPHORA, sp?

- ♀ 1. Biskra, 3, iv, 97. (*A. E. E.*)

ANTHOPHORA PILIPES, Fab.

- ♂ ♀. Common from various localities in March, April and May. (*A. E. E.* and *F. D. M.*) Visiting

Cerithe aspera, *Echium* and *Prasium magus* at Bône and Algiers in March and April; *Stachys circeinata* and *Psoralea bituminosa*, at Constantine in May. (A. E. E.)

Dr. Longstaff took it at Hamman Meskrouine on flowers of *Cynoglossum cheirifolium*, 12, iii, 05, and at Hamman Rhirha at flowers of *Vinea*, 28, iii, 05.

BOMBUS LÆSUS, Mor.

- ♂ ♀. Médéa, on Koudia Sma, alt. about 3,180 ft., on *Eryngium triquetrum* and *Echium*, 3 and 8, vii, 93. (A. E. E.)
- ♀. Médéa, slopes of the Nador up to 3,300 ft., on *Onopordon macracanthum*, 4, vii, 93. (A. E. E.)
- ♂ 2. Lodi, alt. 2,980–3,440 ft., on *Eryngium triquetrum*, it also visits *Centaurea calcitrapa*, 13, vii, 93. (A. E. E.)
- ♂ 4. Aine Draham (Tunisie), alt. 2,700 ft., visiting *Centaurea melitensis*, 20, vii, 96. (A. E. E.)
- ♂ 1. La Calle, 14, vii, 96. (A. E. E.)

BOMBUS RAIELLUS, K.

- ♂ 1. Aine Draham (Tunisie), alt. 2,700 ft., visiting *Centaurea melitensis*, 20, vii, 96. (A. E. E.)

A very unusual variety with the apical segments of the abdomen white.

BOMBUS HORTORUM, L.

- ♂ 2. Médéa, slopes of the Nador, on *Onopordon macracanthum*, 2, vii, 93. (A. E. E.)
- ♂ 4, ♀ 3. La Calle, on *Delphinium peregrinum*, 1 to 15, vii, 96. (A. E. E.)
- ♂ 1. Constantine, 19, vi, 98. (F. D. M.)
- ♀ 1. Algiers, 6, iv, 98. (F. D. M.)

BOMBUS SOROENSIS, F.

- ♀ 1. Aine Kriar, on *Linaria reticulata*, 22, vi, 96. (A. E. E.)

BOMBUS TERRESTRIS (*lucorum*), L.

- ♂. Constantine, on *Onopordon macracanthum*, 11, vi, 94. (A. E. E.)

- ♀. Médéa, slopes of the Nador up to 3,300 ft., on
Onopordon macracanthum, 4, vii, 93. (A. E. E.)
- ♂. El Biar near Algiers, 17, ii, 93. (A. E. E.)
- ♀ ♂. Bône, 17, ii, 96 and 2, iii, 96. The common *Bombus*
of the district. (A. E. E.)
- ♂ 2. „ Djebel Edough, 11, v, 96. (A. E. E.)
- ♂ 2, ♀ 1. Algiers, 16, iii to 9, iv, 98. (F. D. M.)